LETTER REPORT FOR SITE AIR MONITORING AND SAMPLING ACTIVITIES APRIL 6, APRIL 10, APRIL 11, APRIL 13, APRIL 15, APRIL 16 and APRIL 17, 2006 AT THE WILLIAMSBURG RECEIVING & STORAGE AND CHERRY BLOSSOM LLC SITE 10190 MUNRO ROAD WILLIAMSBURG, GRAND TRAVERSE COUNTY, MICHIGAN

Prepared for

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V Emergency Response Branch
801 Garfield Avenue, #229
Traverse City, MI 49686

Prepared by

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Date Prepared	May 31, 2006
TDD Number	0512-001
Document Control Number	574-2A-AGPV
Contract Number	68-W-00-119
START Project Manager	Ted LaMarre
Telephone No.	517-381-5926
U.S. EPA On-Scene Coordinator	Ralph Dollhopf

LETTER REPORT FOR
SITE AIR MONITORING AND SAMPLING ACTIVITIES
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Prepared by _____ Date 6/1/06
Ted LaMarre
START Project Manager

Reviewed & Approved by _____ Date 6-1-06
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May 31, 2006

Mr. Ralph Dollhopf, On-Scene Coordinator
United States Environmental Protection Agency
Region V Emergency Response Branch
801 Garfield Avenue, #229
Traverse City, MI 49686

RE: Site Air Monitoring and Sampling Activities
April 6, April 10, April 11, April 13, April 15, April 16 and April 17, 2006
Williamsburg Receiving & Storage and Cherry Blossom LLC Site
Williamsburg, Grand Traverse County, Michigan
Contract No: 68-W-00-119
TDD: 0512-001
DCN: 574-2A-AGPV

Dear Mr. Dollhopf:

The United States Environmental Protection Agency (U.S. EPA) tasked Weston Solution, Inc. (WESTON®) and WESTON's subcontractor, Global Remediation Technologies, Inc. (GRT) under the Superfund Technical Assessment and Response Team (START) Contract (Contract No. 68-W-00-119) to conduct air quality monitoring and sampling activities at the Williamsburg Receiving & Storage (WRS) and Cherry Blossom LLC Site (Site) and at the surrounding residential areas in Williamsburg, Grand Traverse County, Michigan.

Two companies operate at the Site. WRS performs cherry processing activities (preserving, sorting and pitting the cherries) and Cherry Blossom LLC performs cherry finishing (adding flavor and coloring to the cherries) and packaging activities. Both companies reportedly have pumped wastewater to an onsite lagoon. Numerous odor complaints from neighboring residents, presumably caused by the degradation of organic matter in the lagoon, have been documented by the Michigan Department of Environmental Quality.

The objectives of the air quality monitoring and air sampling activities were as follows:

- Characterize and determine the concentrations of odor causing chemicals at the Site;
- Determine if chemicals regulated by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) are being released to offsite areas; and
- Determine whether concentrations of chemicals released from the Site approach public health criteria and guidelines in order to assist the OSC in determining whether a threat or potential threat to public health may be posed by the release of such chemicals.

To achieve these objectives, WESTON and GRT conducted monitoring and sampling activities at the Site to characterize the source of the odor causing compounds, provided an on-call monitoring and sampling team to respond to residential odor complaints, and conducted offsite monitoring activities on seven different days between April 6 and April 17, 2006. The air quality monitoring and air sampling field activities were conducted during periods of known Site operator activities (i.e. lagoon pumping) and in response to residents odor complaints.

GRT conducted air quality monitoring and sampling at the Site and the surrounding residential area, including the lagoon, maintenance building, and residential properties along Munro Road, Angell Road, Gay Road, and Elk Lake Road on the following dates: April 6, 2006, April 10, 2006, April 11, 2006, April 13, 2006, April 15, 2006, April 16, 2006, and April 17, 2006. The air monitoring results are summarized on the attached **Tables 1** through **7.** Sample locations and results are shown on attached **Figures 1** through **8**. A summary table of the air sample results and the laboratory data sheets are provided in **Attachment 1**. Unless otherwise indicated, all air quality monitoring measurements were taken at the breathing zone level (four to six feet above ground level).

On April 13, 2006, GRT collected one air sample from the wastewater tank room within the maintenance building at the Site and on April 17, 2006, GRT collected one air sample near the southwest edge of the onsite lagoon. Both samples were analyzed for carboxylic acids, amines, reduced sulfur compounds, and volatile organic compounds (VOCs). The air samples were collected at the breathing zone level. Air quality monitoring and sampling activities are summarized below.

APRIL 6, 2006 MONITORING ACTIVITIES

On the evening of April 6, 2006, three representatives from GRT traveled to the Site to conduct air quality monitoring in anticipation that intense odors would be present during the evening (a resident had complained of intense odor during the evening of April 5, 2006). Representatives from Cherry Blossom and WRS were also present during air quality monitoring activities. GRT team members conducted monitoring activities using two VOC Mini-RAE photoionization detectors (PIDs) manufactured by RAE Systems, Inc. (RAE) with 10.6 electron volt (ev) lamps, and two 4000 Series Digital Compact Portable Analyzer with hydrogen sulfide sensors (sensor model number 117SQR) manufactured by Interscan Corporation (Interscan). Prior to commencement of air monitoring activities, the PIDs were calibrated according to the manufacturer's instructions using a 100 parts per million (ppm) isobutylene gas standard. The hydrogen sulfide monitors were factory calibrated (according to Interscan, on-site calibration of the hydrogen sulfide sensors is not necessary). At a location upwind of the Site, the hydrogen sulfide sensors were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Monitoring for hydrogen sulfide and VOCs was conducted at 13 locations around the perimeter of the lagoon; two locations near the WRS processing facility; and six locations at residential properties along Munro Road, Angell Road, and Elk Lake Road. The geographic coordinates of each monitoring location were collected by GRT personnel using a Garmin Etrex Vista global positioning system (GPS) unit. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 1**. Monitoring location notes and monitoring results are summarized in **Table 1**. No odors were noted outside of the WRS property boundary on April 6, 2006. Pungent, putrid odors were noted at downwind monitoring locations along the lagoon at the Site (**Table 1**). Due to the low intensity of the odors, no air samples were collected. Air quality monitoring data collected on April 6, 2006 are summarized as follows:

- Hydrogen sulfide measurements obtained from the perimeter of the lagoon and in surrounding residential areas averaged 0 parts per billion (ppb);
- VOC measurements averaged 160 ppb in surrounding residential areas and 60 ppb along the perimeter of the lagoon; and
- Measurements obtained from beneath the lagoon cover had peak hydrogen sulfide measurements of 1,902 ppb and peak VOC measurements of 8,000 ppb.

APRIL 10, 2006 MONITORING ACTIVITIES

On the morning of April 10, 2006, two representatives from GRT traveled to the Site to conduct air quality monitoring while WRS was pumping lagoon water to the tank building and transferring it into trucks for off-site disposal. The monitoring and sampling team suspected that similar pumping activities during the daytime of April 5, 2006 resulted in the intense odor experienced by residents on the evening of April 5, 2006. Representatives from Cherry Blossom and WRS were also present during air quality monitoring activities. GRT team members conducting monitoring activities used one PPB RAE PID and one PPB-RAE Plus manufactured by RAE (both with 10.6 ev lamps), and two Interscan hydrogen sulfide monitors. The PPB-RAE and PPB-RAE Plus PIDs were used instead of the Mini-RAE PIDs for increased sensitivity for low-level VOC measurements. Prior to commencement of monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Monitoring for hydrogen sulfide and VOCs was conducted at twelve locations along or slightly downwind of the lagoon, five locations along Elk Lake Road, four locations along Munro Road, seventeen locations along the perimeter of the maintenance building, and fifteen locations from within the wastewater tank room located within the maintenance building. The geographic coordinates of each monitoring location were collected by GRT personnel using a Garmin Etrex Vista GPS unit except for those collected within the maintenance building. The monitoring locations

and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figures 2** and **3**. Monitoring location notes and monitoring results are summarized in **Table 2**.

A sweet, cherry-processing odor was present outside the WRS offices on April 10, 2006. A pungent, putrid odor mixed with a citrus odor was present within the wastewater tank building. The owner of the Site stated that the wastewater tanks vented into the perimeter hallway of the wastewater tank building, which is located within the maintenance building. This location exhibited a stronger citrus odor than putrid odor. The source of the citrus odor was the air freshener unit. The air freshener, ProSweet OC2533, is comprised mostly of essential oils and is located in a barrel inside a compressor that heats the oil to form a vapor. The vapor is pumped into the top of the tanks during filling activities. GRT personnel monitored the head space of the barrel with the air freshener and observed elevated VOC readings of 1,300,000 ppb and a hydrogen sulfide reading of 1,542 ppb. Due to the elevated VOC and hydrogen sulfide readings from the air freshener barrel, WRS was asked to turn the air freshener off so that measurements could be made without the presence of the air freshener in the air. The air freshener system was turned off at 1256 hours.

While monitoring along the lagoon, the Site owner mentioned that lime was added to the lagoon the previous evening. Large piles were still present along the lagoon perimeter. The WRS owner mentioned that additional lime would be added to the lagoon as he believed the lime reduced the odors in the area.

No odors were detected in off-site residential areas during monitoring activities on April 10, 2006, thus no air samples were collected. Air quality monitoring data for April 10, 2006 are summarized as follows:

- Average hydrogen sulfide and VOC measurements along the lagoon perimeter were 7 ppb and 0 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the wastewater tank room prior to pumping from the lagoon were 500 ppb and 600 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the hallway along the perimeter of the wastewater tank room prior to pumping from the lagoon were 500 ppb and 1,100 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the wastewater tank room while pumping from the lagoon were 900 ppb and 2,800 ppb, respectively;
- Average hydrogen sulfide and VOC measurements along Munro Road were 4 ppb and 0 ppb respectively; and
- Neither VOCs nor hydrogen sulfide measurements were detected along Angell or Elk Lake Roads.

APRIL 11, 2006 MONITORING ACTIVITIES

On April 11, 2006, two representatives from GRT traveled to the Site to conduct air quality monitoring during placement of wastewater into tanker trucks. Representatives from Cherry Blossom and WRS were also present during air quality monitoring activities. GRT team members conducted monitoring activities using one PPB-RAE PID, one PPB-RAE Plus, and two Interscan hydrogen sulfide monitors. Prior to commencement of monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Monitoring for hydrogen sulfide and VOCs was conducted at one location along the lagoon, one location along Gay Road, eight locations along Munro Road, one location along Angell Road, and eleven locations along the perimeter of the maintenance building. The geographic coordinates of each monitoring location were collected by GRT personnel using a Garmin Etrex Vista GPS unit except for those collected within the maintenance building. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 4**. Monitoring location notes and monitoring results are summarized in **Table 3**.

Pungent, putrid odors were present in the interior of the wastewater tank building on April 11, 2006. Putrid odors were detected in residential properties along Munro Road. Intermittent putrid odors correlated with peak hydrogen sulfide measurements.

Air quality monitoring data collected on April 11, 2006 are summarized as follows:

- Average hydrogen sulfide and VOC measurements along the lagoon perimeter were 4 ppb and 0 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the wastewater tank room while pumping from the lagoon were 900 ppb and 2,800 ppb, respectively;
- Average hydrogen sulfide and VOC measurements along the perimeter of the maintenance building while pumping from the lagoon were 3 ppb and 5 ppb, respectively;
- No VOCs were detected off site; and
- Hydrogen sulfide measurements peaked at 10 ppb along Munro Road.

APRIL 13, 2006 MONITORING AND SAMPLING ACTIVITIES

On April 13, 2006, two representatives from GRT traveled to the Site to conduct air quality monitoring and sampling. Representatives from Cherry Blossom and WRS were also present during air quality monitoring and sampling activities. GRT team members conducted monitoring activities using one PPB-RAE PID, one PPB-RAE Plus, and two Interscan hydrogen sulfide monitors. Prior to

monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Air Quality Monitoring Activities

Monitoring for hydrogen sulfide and VOCs was conducted at three locations along the lagoon, one location along Elk Lake Road, eight locations along the perimeter of the maintenance building, and seven locations from within the maintenance building. The geographic coordinates of each monitoring location were collected by GRT personnel using a Garmin Etrex Vista GPS unit except for those collected within the maintenance building. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 5**. Monitoring location notes and monitoring results are summarized in **Table 4**.

Pungent, putrid odors were present 20 feet south and east of the maintenance building while lagoon pumping and tanker loading activities were occurring. Odors were intermittent and were correlated with increased hydrogen sulfide and VOC readings. Winds were variable out of the west and north. No odors were detected by GRT personnel west and north of the maintenance building.

Air quality monitoring data collected on April 13, 2006 are summarized as follows:

- Average hydrogen sulfide and VOC measurements along the lagoon perimeter were 3 ppb and 0 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the wastewater tank room prior to pumping from the lagoon were 600 ppb and 675 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the hallway along the perimeter of the wastewater tank room prior to pumping from the lagoon were 90 ppb and 290 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the wastewater tank room while pumping from the lagoon were 1,840 ppb and 2,325 ppb, respectively;
- Average hydrogen sulfide and VOC measurements within the hallway along the perimeter of the wastewater tank room while pumping from the lagoon were 1,117 ppb and 770 ppb, respectively; and
- Average hydrogen sulfide and VOC measurements at 10329 Elk Lake Road were 4 ppb and 0 ppb, respectively.

Air Quality Sampling Activities

GRT personnel collected one air sample from the wastewater tank room within the maintenance

building at the Site on April 13, 2006 for off site analysis of carboxylic acids, amines, reduced sulfur compounds, and VOCs in accordance with the sampling methods specified in the draft Air Sampling Plan dated April 4, 2006. This location was selected due to elevated levels of hydrogen sulfide and VOCs measured during monitoring activities within the maintenance building. The air freshener was not in use during sample collection activities; however a slight citrus odor was still present.

A sample for carboxylic acids and amines was collected with analyte specific gel tubes using SKC model 224-PCXR8 air pumps. The pumps were calibrated prior to and after sampling for a 1 liter/minute flow rate utilizing a dry cell flow calibrator manufactured by BIOs International. Reduced sulfur compounds and VOCs were collected with a silco canister amended with a 90-minute flow controller. Prior to and following sample collection, vacuum readings of the Silco canister were recorded. Field blanks were collected for carboxylic acids and amines according to the laboratory's instructions. The gel tubes and silco canisters were shipped via overnight courier to Columbia Analytical Services in Simi Valley, California under proper chain of custody (COC) procedures. Analytical data from the April 13, 2006 air sample are summarized and presented in **Attachment 1**. Air sample analytical data are summarized as follows:

- Reduced sulfur compounds detected included: hydrogen sulfide and methyl mercaptan;
- VOCs detected included: ethanol, n-hexane, toluene, ethylbenzene, m,p-xylene, o-xylene, n-nonane, 1,2,4-trimethylbenzene, and d-Limonene;
- Carboxylic acids detected included: acetic acid, propionic acid, butyric acid, 2-methyl butanoic acid, valeric acid, caproic acid, heptanoic acid, caprylic acid, and nonanoic acid; and
- Amine compounds were not detected.

APRIL 15, 2006 MONITORING ACTIVITIES

On April 15, 2006, four representatives from GRT traveled to the Site to conduct air quality monitoring after a local resident complained of odors along Elk Lake Trail. GRT team members conducted monitoring activities using one PPB-RAE PID, one PPB-RAE Plus, and two Interscan hydrogen sulfide monitors. Prior to monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

No odors were present along Elk Lake Trail and Elk Lake Road when GRT personnel arrived on site, thus no air samples were collected. After investigating the area along Elk Lake Road and Elk Lake Trail, GRT personnel began monitoring along Munro Road. Monitoring for hydrogen sulfide and

VOCs was conducted at five locations along the lagoon, and four locations along Munro Road. The geographic coordinates of each monitoring location were collected by GRT personnel using a Garmin Etrex Vista GPS unit. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 6.** Monitoring location notes and monitoring results are summarized in **Table 5.**

The WRS owner approached a GRT team member while monitoring was being conducted along Munro Road. The owner mentioned that WRS had added approximately 500 gallons of 50% hydrogen peroxide to the lagoon the previous day. GRT personnel asked permission to monitor along the lagoon perimeter and the owner agreed. While monitoring along the lagoon, GRT personnel noted that they heard bubbling along the perimeter of the lagoon and that pungent, putrid odors were migrating downwind. Debris was observed floating on top of the lagoon and bubbling on the lagoon surface was observed along the north-central perimeter when illuminated with portable lamps.

Air quality monitoring data collected on April 15, 2006 are summarized as follows:

- Average hydrogen sulfide and VOC readings along Munro Road were 2 ppb and 0 ppb respectively.
- Average hydrogen sulfide and VOC readings along the lagoon were 4 ppb and 20 ppb respectively.

APRIL 16, 2006 MONITORING ACTIVITIES

On April 16, 2006, three representatives from GRT traveled to the Site to conduct air quality monitoring after a local resident complained of odors along Munro Road. GRT personnel conducted monitoring activities using one PPB-RAE PID, one PPB-RAE Plus, and two Interscan hydrogen sulfide monitors. Prior to monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Upon arrival at Munro Road, the homeowners informed GRT personnel of the odors that they experienced earlier that day. They mentioned that the odors were so bad that their family picnic and other activities had to be moved inside. Friends and family complained strongly of the severity of odors. When GRT personnel arrived, the residents mentioned that the odors were far less intense than what they were earlier than evening.

Monitoring for hydrogen sulfide and VOCs was conducted at five locations along Munro Road and geographic coordinates of each monitoring location were collected utilizing a Garmin Etrex Vista GPS unit. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 7**. Monitoring location notes and monitoring results are summarized in **Table 6**.

The wind was out of the east and intermittent pungent, putrid odors were noted during monitoring activities on April 16, 2006. The intermittent putrid odor was correlated with peak measurements of hydrogen sulfide and VOCs. The putrid odor was very strong and GRT personnel experienced a foul taste associated with the odor and experienced mild nausea. South of the residence located at 10125 Munro Road, a very strong, overpowering citrus odor was noted. GRT personnel noted that the odor was the same as the air freshener used in the tank room at WRS. Later that evening, the Site owner stated that the air freshener was being used again at the Site. In addition, the Site owner stated that he had been pumping from the lagoon and hauling liquid from the tanks offsite for disposal all day. The Site owner also stated that he planned on adding more hydrogen peroxide to the lagoon on Monday, April 17, 2006.

Air quality monitoring data collected on April 16, 2006 are summarized as follows:

- Hydrogen sulfide measurements at 10240 Munro Road and 10125 Munro Road averaged 1 ppb but peaked at 7 ppb and 3 ppb, respectively; and
- VOC measurements at 10240 Munro Road and 10125 Munro Road peaked at 33 ppb and 95 ppb, respectively.

APRIL 17, 2006 MONITORING AND SAMPLING ACTIVITIES

On April 17, 2006, two representatives from GRT traveled to the Site to conduct air quality monitoring and sampling during hydrogen peroxide addition activities at the lagoon. GRT personnel contacted the Site owner and obtained permission to monitor the air quality prior to and following the hydrogen peroxide addition to the lagoon.

GRT team members conducted monitoring activities using one PPB-RAE PID, one PPB-RAE Plus, and two Interscan hydrogen sulfide monitors. Prior to monitoring, the PIDs were calibrated according to the manufacturer's instructions using a 10 ppm isobutylene gas standard. At a location upwind of the Site, the hydrogen sulfide meters were zeroed and background VOC measurements were obtained with the PIDs. GRT also performed a calibration check with each of the PIDs at the end of the monitoring event with the isobutylene gas (calibration check standards were within acceptable limits).

Air Quality Monitoring Activities

Monitoring for hydrogen sulfide and VOCs was conducted at six locations along the lagoon, four locations downwind of the lagoon along two transects (west and southwest), three times at the southwest end of the lagoon where the air sample was being collected, and at two locations proximal to 10125 Munro Road, which were the most downwind locations of the southwesterly transect. The geographic coordinates of each monitoring locations were collected by GRT personnel using a Garmin Etrex Vista GPS unit. The monitoring locations and hydrogen sulfide and VOC measurements from each monitoring location are illustrated on **Figure 8**. Monitoring location notes and monitoring results are summarized in **Table 7**.

WRS personnel added approximately 500 gallons of 50% hydrogen peroxide to the lagoon with a pressurized irrigation hose. Hydrogen peroxide addition started at the east end and moved towards the west. The hydrogen peroxide was placed in the lagoon from approximately five discreet locations along the northern edge of the lagoon. After hydrogen peroxide addition was complete, the surface of the lagoon turned white with foam and over time turned tan/brown with increased particulates floating to the surface. Within five minutes of the completion of the hydrogen peroxide addition, GRT personnel were monitoring at the west end of the lagoon (downwind location). Pungent, putrid odors experienced during monitoring were the most intense experienced thus far by GRT personnel. While on site GRT personnel experienced burning and watering eyes. Later in the day, GRT personnel experienced headaches and sore throats which may have been attributed to the experience at the west end of the lagoon following the hydrogen peroxide addition.

Air quality monitoring data collected on April 17, 2006 are summarized as follows:

- Prior to hydrogen peroxide addition, hydrogen sulfide and VOC measurements along the lagoon perimeter averaged, 0 ppb and 10 ppb, respectively;
- Following hydrogen peroxide addition, hydrogen sulfide measurements along the lagoon perimeter peaked at 1,813 ppb and VOC measurements peaked at 57 ppb;
- VOC measurements obtained from 10240 Munro Road and 10125 Munro Road peaked at 33 ppb and 95 ppb, respectively;
- Hydrogen sulfide and VOC measurements along the southwesterly transect (winds from the northeast) averaged 17 ppb and 2 ppb, respectively; and
- Hydrogen sulfide and VOC measurements along the westerly transect (winds from the northeast) averaged 9 ppb and 0 ppb, respectively.

Air Quality Sampling Activities

Air sample collection began at the southwest end of the lagoon approximately 20 minutes after the addition of hydrogen peroxide to the lagoon. During the collection of the air sample, smoke from smoldering fires was observed resulting from the hydrogen peroxide reacting with the plastic cover at various locations. WRS personnel extinguished the fires.

A sample for carboxylic acids and amines was collected with analyte specific gel tubes using SKC model 224-PCXR8 air pumps. The pumps were calibrated prior to and after sampling for a 1 liter/minute flow rate utilizing a dry cell flow calibrator manufactured by BIOs International. A sample for reduced sulfur compounds and VOCs was collected with a silco canister amended with a 90-minute flow controller. Prior to and following sample collection, vacuum readings of the silco canister were recorded. Field blanks were collected for carboxylic acids and amines according to the laboratory's instructions. The gel tubes and silco canisters were shipped by overnight courier to Columbia Analytical Services in Simi Valley, California under proper chain of custody (COC) procedures. A summary of the analytical data summary and laboratory analytical data sheets are presented in **Attachment 1**. Air quality analytical data are summarized as follows:

- No reduced sulfur compound were detected;
- VOCs detected included: dichlorofluoromethane, ethanol, and toluene;
- Carboxylic acids detected included: acetic acid, butyric acid, 2-methyl butanoic acid, valeric acid, caproic acid, heptanoic acid, and caprylic acid; and
- No amine compounds were detected.

SUMMARY AND COMPARISON TO REGULATORY CRITERIA

VOC and hydrogen sulfide air monitoring was conducted at the Site and surrounding residential areas on the following dates: April 6, April 10, April 11, April 13, April 15, April 16 and April 17, 2006. Air samples were collected on Site and analyzed for carboxylic acids, amines, reduced sulfur compounds and VOCs following the methods specified in the draft Work Plan dated April 04, 2006. One air sample was collected from inside the maintenance building where the wastewater storage tanks are located on April 13, 2006. The other air sample was collected on the perimeter of the west side of the lagoon on April 17, 2006.

The highest air monitoring readings were located in the maintenance building where the wastewater storage tanks are located. VOC and hydrogen sulfide concentrations peaked at 11,300 ppb and 2,500 ppb, respectively. Readings of the VOC and hydrogen sulfide in the residential areas peaked at 300 ppb and 23 ppb, respectively.

Hydrogen sulfide measurements collected in the residential areas approached the Agency for Toxic Substance and Disease Registry (ATSDR) acute minimum risk level (MRL) of 70 ppb (estimate of the daily human exposure that is likely to be without an appreciated risk of adverse, non-carcinogenic effects over 1 to 14 days of exposure) and the ATSDR intermediate MRL of 30 ppb (estimate of the daily human exposure that is likely to be without an appreciable risk of adverse, noncarcinogenic effects over 15 to 365 days of exposure). No regulatory criteria exists for total VOCs concentrations in air.

Due to the intermittent nature of the odors, the air quality monitoring measurements were not collected during periods when the odors were the most intense. GRT field monitoring staff observed a strong relationship between odor intensity and increased concentrations of hydrogen sulfide and VOCs both on and offsite. This fact, combined with descriptions of historical odor intensity provided to GRT field monitoring staff by local residents, suggest that higher VOC and hydrogen sulfide monitoring results, perhaps exceeding the above regulatory criteria or recommended guidelines, may be observed during future monitoring events conducted during periods when more intense odors are observed by monitoring staff. Such conditions may occur as weather continues to warm and/or site operations involving the disturbance of the lagoon wastewater increase.

The analytical data from the air samples were compared to the following regulatory criteria as indicated in **Attachment 1**.

U.S EPA Region 9 Preliminary Remediation Goals (PRGs): Combines human health toxicity values with standard exposure factors to estimate contaminant concentrations that are considered by the U.S. EPA to be protective of human health (including sensitive populations), over a lifetime.

Michigan Department of Environmental Quality - Remediation and Redevelopment Division (MDEQ-RRD) Acceptable Indoor Air Concentrations (AIACs): Concentrations in building indoor air that are protective of occupancy exposures. The AIACs were generated as a necessary starting location for back-calculating the Part 201 Groundwater and Soil Volatilization to Indoor Air Inhalation Criteria and the Part 213 Groundwater and Soil Volatilization to Indoor Air Risk-Based Screening Levels.

Michigan Department of Environmental Quality - Air Quality Division (MDEQ-AQD) Initial Risk Screening Level: The concentration of a possible, probable, or known human carcinogen in ambient air which has been calculated to produce an estimated upper-bound lifetime cancer risk of 1 in 1,000,000. These values are not applicable for indoor air criteria. They are applicable to outdoor property boundaries and are used to determine if an air permit may be required.

MDEQ-AQD Initial Threshold Screening Level: The concentration of toxic air contaminant in the ambient air which is used to evaluate noncarcinogenic health effects. These values are not applicable for indoor air criteria. They are applicable to outdoor property boundaries and are used to determine if an air permit may be required.

Analytical results of the air sample collected from within the maintenance building (April 13, 2006) indicated that hydrogen sulfide, methyl mercaptan and 1,2,4-trimethylbenzene were detected at concentrations greater than the U.S. EPA Region 9 PRG. Hydrogen sulfide was also detected above the MDEQ/AQD ITSL, the ATSDR acute MRL and the ATSDR intermediate MRL. 2-Methylpropanoic acid (Isobutyic acid) was detected above the MDEQ-AQD ITSL.

Analytical results of the air sample collected at the lagoon perimeter on April 17, 2006 indicated that none of the contaminants were detected above the regulatory levels.

RECOMMENDATIONS

Based on the evaluation of the results of the air monitoring and air sampling activities conducted at the Site, WESTON recommends the following additional actions:

- Continue conducting hydrogen sulfide monitoring when strong odors are experienced by residents.
- Collect air sample(s) from offsite residential areas for laboratory analysis during periods when odors are the most intense.
- Conduct air monitoring and sampling during activities associated with the closure of the on site lagoon.
- Submit the monitoring and sampling data collected thus far to local and state health agencies for evaluation of potential on site worker and offsite resident health risks from hazardous substance release.

Please contact Daniel M. Capone at 517 381-5932 if any clarification or further assistance is needed.

Very truly yours,
WESTON SOLUTIONS, INC.

Ted R. LaMarre
START Project Manager

Daniel M. Capone
START Senior Project Manage

TABLES

Table 1 - April 6, 2006

10125 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
20:01	Slight sweet smell (rotten sugar), temperature dropping 42 F (estimated), no wind	200.0		0	

10091 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
19:53		200.0		0	

10115 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
19:57		200.0		0	

10240 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
20:12	Little to no wind, light odor	200.0		0	

10329 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
20:05		0.0		0	

8188 Angell Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
20:21	No odor at this location, Steve Niehaus smells a mild sweet odor	300.0		0	

Table 1 - April 6, 2006

AM-15

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
18:16	Odor apparent (putrid), no wind, no rain	200.0		0	

AM-16

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
19:00	Sampling done around 19:00, exact time not documented		8,000.0		1902

AM-42

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:49	No odor	0.0		0	

AM-44

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:56	No odor, began raining	0.0		0	

AM-45

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
18:00	No odor, very light rain	0.0		0	

AM-47

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
18:07	Light wind, very light intermittent rain, odor apparent (putrid)	100.0		0	

Table 1 - April 6, 2006

AM-48

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
18:11	Odor apparent, rain stopped, no wind, odor comes and goes (putrid and pungent), burns the eyes a little	100.0		0	

AM-5

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
17:39	Pungent and putrid odor apparent	0.0		0	

AM-50

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
18:33	Peak and average measurements recorded	700.0	1,400.0	28	69

AM-50A

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
18:20	Odor apparent (putrid), north wind 0-5 mph variable, no rain	200.0		0	

AM-53

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
19:24		200.0		1	

AM-54

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
19:31	No odor, Steve Niehaus states sweet smell, slight wind, slight putrid odor intermittent, rain stopped	500.0		0	

Table 1 - April 6, 2006

AM-6

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:47	No odor	0.0		0	

AM-69

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:43	Little wind, northwest 0-5mph	0.0		0	

AM-7

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:53	No odor	0.0		0	

AM-8

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
18:03	Odor apparent (putrid), light rain, light north wind	0.0		0	

Table 2-April 10, 2006

10125 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
15:44	Wind south-southwest, variable. No odor.	0.0	0.0		

Wyndale Farms

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:12		0.0	0.0		

10091 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
15:54	Light south wind. No odor.	0.0	0.0		

10114 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:16	No odor. Variable light southwest wind.	0.0	0.0		

10115 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
15:49	South-southwest light wind. Cloudy skies. No odor.	0.0	0.0		

10144 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:20	Wind south-southwest light. No odor.	0.0	0.0		

Table 2-April 10, 2006

10240 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
15:35	No odor. Light wind from south. Overcast skies.	0.0	0.0		

10260 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:30	Wind southwest to south (variable)	0.0	0.0		

10423 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:40	Wind south to southwest (light). Cloudy skies.	0.0	0.0		

8188 Angell Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
16:04	Variable south wind. No odor.	0.0	0.0		

AM-1

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:45	Background location. (Corner of Angell Road and Hwy 31)	0.0		3	4

AM-10

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
12:23	Sweet odor-processing.				
15:20	Sweet odor-processing.	0.0	9.0		

Table 2-April 10, 2006

AM-13

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:30	Putrid odor. Southerly wind. Mostly cloudy.	0.0	0.0		

AM-14

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:36	Slight intermittent putrid odor. Winds south-southeast.	0.0	0.0		

AM-15

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:44	Wind south, increased strength, intermittent. Mostly cloudy. Putrid, strength dependent upon wind. VOC value shifts with wind.	0.0	19.0		

AM-16

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:56	Water level in lagoon lower. This sampling location was less moist from "wet" to "damp". Believe that reduction in VOC and H2S concentrations could be from lime addition or the fact that our sampling location was further from the lagoon water than before.	1,800.0	2,500.0	127	932

AM-2

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:40	No odor. Little to no wind (west).	0.0	0.0	6	

Table 2-April 10, 2006

12:44	Slight cherry processing odor. Variable south-southwest wind, 0-5 mph.	0.0	0.0		
14:43	Tank almost full. Readings vary with wind. Odor intermittent (increased with increased water height in tanker).	0.0	23.0		
14:46	Tank full at 14:46.	0.0	0.0		
16:54	Slight putrid odor (intermittent). Southwest wind.	0.0	6.0	41	50
18:13	Tanker loading. Putrid odor.	0.0	0.0		

AM-28

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
17:12	No odor. Winds-variable from north & west.	0.0	0.0		

AM-3

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:50	Slight sweet odor. Slight citrus odor.	0.0	0.0	9	
12:52	No odor. Slight wind (west).	0.0	0.0		

AM-4

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:55	Intermittent wind. Putrid odor.	0.0	0.0	17	
13:01		0.0	0.0		
14:56	Slight putrid odor.	35.0	124.0		

Table 2-April 10, 2006

17:17	Slight sweet odor. Wind west-northwest.	0.0	0.0		

AM-48

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:31	Variable North wind, 0-10 mph. Putrid odor, intermittent (strength intermittent).	0.0	0.0	6	
17:31	South-southwest wind. No odor. Leak at pump/hose interface and at green hose to PVC connection.	0.0	0.0		

AM-5

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:10	Diesel tractor/front-end loader running ~25' away.	0.0	0.0	7	
17:36	Putrid odor. North-northwest wind light (intermittent). Eyes slightly burning. Odor is less strong than earlier today. Wind velocity is greater, however, lagoon water is clearer than it was.	0.0	0.0		

AM-6

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:16	Putrid odor. Mostly cloudy.	0.0	0.0	6	
13:24	Putrid odor. South-southeast wind (variable, 0-5 mph).	0.0	31.0		

AM-67

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:51	Air freshener sampled inside 55-gallon barrel. Sampled near vent hole.		1,300,000.0		1542

Table 2-April 10, 2006

AM-7

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:21	Pungent, putrid odor. Slight eye burning.	0.0	0.0	7	

AM-8

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:26	Pungent, putrid odor. Slight odor (burning eyes). South-southwest wind.	0.0	0.0	7	

Hallway

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:35	Pungent, putrid odor.	900.0	1,100.0	500	602
11:49				812	818
11:49	Odor - citrus (air freshener). Air freshener: Prosweet OC 2533 Essential Oil.	7,200.0	11,300.0	660	760
14:36	Citrus odor. Hint of putrid odor.	2,800.0			
14:36	Citrus odor. Hint of putrid odor.	2,500.0	2,880.0	1891	1891
17:03	Odor - citrus (more strong odor). Putrid odor intermittent.	3,000.0	6,348.0	1287	1821

WW Room Entrance

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
		3,600.0	4,700.0	1888	1888

Table 2-April 10, 2006

		4,000.0	4,650.0		
10:25	Pungent, putrid odor.	600.0	1,400.0	330	550
11:42	Pungent, putrid odor.			950	1017
11:42	Air freshener odor (sweet) mixed with putrid odor.	2,400.0	6,400.0	760	935
16:59	Tanker in place actively pumping.	2,750.0	2,800.0	1821	1822

WW Tank Room

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:30	Stronger odor than near entry (pungent, putrid), door to ww tank room was left open. Vents from tanks vent into the perimeter of the ww tank building.	600.0	700.0	500	530
11:46	Air freshener odor (sweet) mixed with putrid odor.			779	804
11:46	Air freshener odor (sweet) mixed with putrid odor.	2,800.0	3,100.0	850	1011
14:17	Odor is more putrid than citrus.	2,900.0	4,200.0	932	1102
14:18				1187	
14:21				1892	
14:22	Pumping from tank #1.	2,263.0	2,234.0	1889	

Table 3 - April 11, 2006

10125 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:43	Slight intermittent putrid odor. Sweet cherry processing odor intermittent (slight)	0.0	0.0	3	6
10:15	Cherry processing odor. Intermittent putrid odor. Winds 0-5mph southeast	0.0	0.0	6	8

10091 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:24	Southeast wind 0-5mph. No odor. Sunny.	0.0	0.0	7	10

10115 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:19	Southeast wind 5-10mph. Sunny. No odor.	0.0	0.0	5	8

10240 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:10	Sweet cherry processing odor. Winds light to moderate (0-10 mph) South-southeast. Partly cloudy.	0.0	0.0	5	6

10329 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:29	Light to no wind (south). No odor. Sunny 50 degrees (estimate). Light traffic. H2S increased with truck traffic.	0.0	0.0	1	10

10565 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:35	Normal car traffic does not appear to affect H2S reading (large trucks only). No odor. Light S wind.	0.0	0.0	2	6

10874 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:59	Southeast wind (variable). Intermittent putrid odor.	0.0	0.0	6	10

Table 3 - April 11, 2006

10912 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:53	South-southeast wind. Intermittent putrid odor (slight). Sunny, estimated 50 degrees F.	0.0	0.0	5	9

8188 Angell Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:30	Southeast wind 0-5mph to 5-10mph. No odor. Sunny.	0.0	0.0	5	8

8231 [illegible]y Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:42	Light south wind then east wind. No odor.	0.0	0.0	3	7

AM-13

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:16	Putrid odor. South-southeast wind variable. Odor intensity varies. Became pungent over 3 minute monitoring interval.	0.0	7.0	4	7

AM-15

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:58	Wind shift (south). Pungent, putrid odor. Slight eye burning. Intensity of odor is variable. H2S and PID readings correlated with odor (increase in odor - increase in readings).	1.0	14.0	6	21

AM-2

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:27	Wind - light east (variable). Slight putrid odor - appears to correlate with H2S and VOC readings.	12.0	83.0	3	11

AM-3

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:31	Slight putrid odor (intermittent).	4.0	22.0	4	7

AM-32

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak

Table 3 - April 11, 2006

10:04	Variable wind (south east to south to west). Intermittent putrid odor (slight).	0.0	0.0	6	8

AM-4

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:35	Intermittent east wind. Slight putrid odor (intermittent).	0.0	0.0	3	6

AM-42

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:02	Partly cloudy. Low 50 degrees (estimate).	0.0	0.0	4	10

AM-45

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:12	Pungent, putrid odor. Intensity varies with wind (southeast). Slight eye burning.	2.0	18.0	6	11

AM-69

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:54	No odor. Calm water. Gas bubbles surfacing (same locations around pond). Wind E-SE (variable).	0.0	0.0	2	4

AM-7

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:05	Behind lime pile. Pungent putrid odor (intensity varies with wind). S wind (variable). Slight eye burning.	0.0	0.0	5	9
9:08	Moderate wind from South. Pungent, putrid odor. Intensity of odor is variable with wind.	2.0	22.0	6	14

AM-71

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:39	Light to light-moderate east to southeast wind. No odor.	0.0	0.0	2	4

AM-9

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:19	No odor. Wind - south. Gas production visible @ lagoon surface.	0.0	0.0	4	

Table 3 - April 11, 2006

Hallway

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:15	Putrid (no citrus).	1,580.0	2,000.0	300	400
11:13		1,170.0	1,220.0	1535	1540
11:13	Putrid, hint of citrus. Pungent.	1,500.0	1,600.0		

WW Room Entrance

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
8:12	Pungent, putrid odor. Citrus air freshener odor still apparent. Tanker was here earlier today. Pumped from tank #2.	1,750.0	2,300.0	550	640
8:18	Floor level		10,800.0		640
8:21	Breathing zone		3,433.0		642
11:10	Pungent, putrid, rancid odor.	1,500.0	2,200.0		
11:10		1,250.0	1,900.0	1330	1345

WW Tank Room #2

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
		1,000.0	1,040.0	1535	1623
		1,400.0	1,500.0		

Table 4 - April 13, 2006

10329 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
12:51	ight traffic. Increases in H2S are associated with traffic passing by. North to north-east wind (0-5 mph).	0.0	0.0	4	12

AM-2

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
9:30	West wind. Sunny skies. Pungent, putrid odor. Intensity intermittent.	0.0	14.0	5	20
14:31	Southeast wind.	1.0	33.0	6	11

AM-3

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:00	West wind 0-5 mph. ear, sunny skies. No odor.	0.0	0.0	1	4
14:36	ittle to no wind. Sunny. Mid 60s, pleasant. Slight odor. Intermittent odor.	0.0	3.0	7	23

AM-4

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:08	West wind 5-10 mph. No odor.	0.0	0.0	0	2
14:41	Intermittent putrid odor.	0.0	6.0	5	24

AM-5

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:39	Wind west 0-10 mph, variable wind, sunny. emp approximately 50s. as bubbles coming from lagoon.	0.0	0.0	2	4

AM-68

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:30	Winds from north 0-5 mph and shifting to west 0-10 mph.	0.0	0.0	0	2
14:53	Putrid odor. West wind. Odor is intermittent. Winds are 0-5 mph.	1.0	6.0	7	15

AM-69

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
10:42	Wind shifting to northwest.	0.0	4.0	2	6
10:49	West wind, pungent, putrid odor, intensity of odor associated with wind.	0.0	2.0	4	10

Table 4 - April 13, 2006

AM-70

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:00		0.0	0.0	4	9
11:00				3	6

AM-71

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
14:45	Winds from the west. Noticed ww hauling truck pumping at 2:48pm. Garage door up.	0.0	4.0	12	27

AM-9

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:07		0.0	0.0	3	10
11:07				1	6

Hallway

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:33	Sampled air prior to truck pumping from tanks.	290.0	350.0	90	115
14:15	Sampled after pumping from tanks.	900.0	1,200.0	1182	1582
15:09		630.0	707.0	1052	1102

WW Room Entrance

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:30	Overhead door open.	650.0	1,185.0	600	680
11:37	While tanker is actively pumping.	700.0	1,035.0	600	650
14:13	Overhead door closed.	2,250.0	2,880.0	1800	2500
15:06		2,400.0	2,412.0	1881	1885

Table 5 - April 15, 2006

10115 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
22:49	Waste odor, very faint.	0.0	0.0	0	1

10240 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:57	Waste odor intermittent. Calm, clear skies.	1.0	18.0	3	6

10754 Elk Lake Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:17	Waste odor mild.	0.0	3.0	3	3

AM-32

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:35	Intermittent waste odor. Little to no wind.	0.0	8.0	1	3

AM-45

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:30	Can hear bubbling from lagoon.	5.0	72.0		
23:33		20.0	70.0	4	

AM-50A

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:17	Slight intermittent odor. Little wind.	10.0	79.0	4	4

AM-6

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:26		13.0	97.0	5	5

AM-69

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:22	Slight putrid odor.	0.0	66.0	4	4

Table 5 - April 15, 2006

AM-72

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:56	Odor - new burned odor that is by lagoon. (Walking along fence line - road between 10125 Munro Road and 10240 Munro Road. Close to power pole~250'N of 10125 Munro Road)	127.0		4	

AM-74

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:35	Pungent, putrid odor varies in intensity.	40.0	165.0	8	9

AM-75

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:00	Odor, slight putrid, no wind. Odor gone within 2 minutes.			3	

AM-9

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
23:42	Odor different. More of a burning rotten egg mixed with putrid odor. This spot more pungent than SW edge. Heard bubbles popping again.	15.0	115.0	11	13

Table 6 - April 16, 2006

10125 Munro Road

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
20:34		0.0	1.0	1	3
21:03	Odor was putrid earlier, now it is the air freshener. Putrid odor more prevalent north of the 10125 Munro. Putrid, pungent odor - intensity increased and decreased. Wind out of the east.	20.0	95.0	0	0
21:05	Strong citrus odor. Winds east at 10 mph.	0.0	0.0	1	
21:15		0.0	0.0	0	0

10240 Munro Road

Time	*Notes*	*VOCs - Average*	*VOCs - Peak*	*H2S - Average*	*H2S - Peak*
0:15		33.0	33.0	4	4
19:58		0.0	7.0	1	7

Table 7 - April 17, 2006

10125 Munro Road

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
12:33	Pungent, putrid odor. Wind east-northeast 3-5 mph.	1.0	7.0	11	22
12:36		0.0	10.0	5	11

AM-48

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:45		20.0	57.0	1813	1817

AM-50A

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:09	North-east winds. Started spraying H202 into lagoon at 11:12am, moved east to west.	18.0	47.0	1	8

AM-69

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:17	After spraying H202 on east end.	0.0	3.0	0	2

AM-73

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:00		0.0	10.0	0	0

AM-74

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
12:09	Strong pungent, putrid odor Intensity decreased since 11:40 AM.	10.0	26.0	400	446
13:06	Smoke coming from north side of lagoon. WRS personnel put out smoldering fire with sticks. Odor of burning rubber in the air.	28.0	79.0	149	211
13:12		15.0	58.0	177	187
13:35		8.0	35.0	46	55

AM-75

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
12:40	Mild, intermittent, putrid odor.	3.0	17.0	7	11

AM-76

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:17	Putrid odor. Wind east-northeast 5-10 mph.	1.0	12.0	17	23

Table 7 - April 17, 2006

AM-77

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:22	Putrid odor.	3.0	15.0	16	25

AM-78

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:26	Winds shifted to west and then back east.	0.0	1.0	5	7

AM-79

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
13:30	Putrid odor. Wafts of smoke odor. Winds east 5-10 mph.	0.0	3.0	12	24

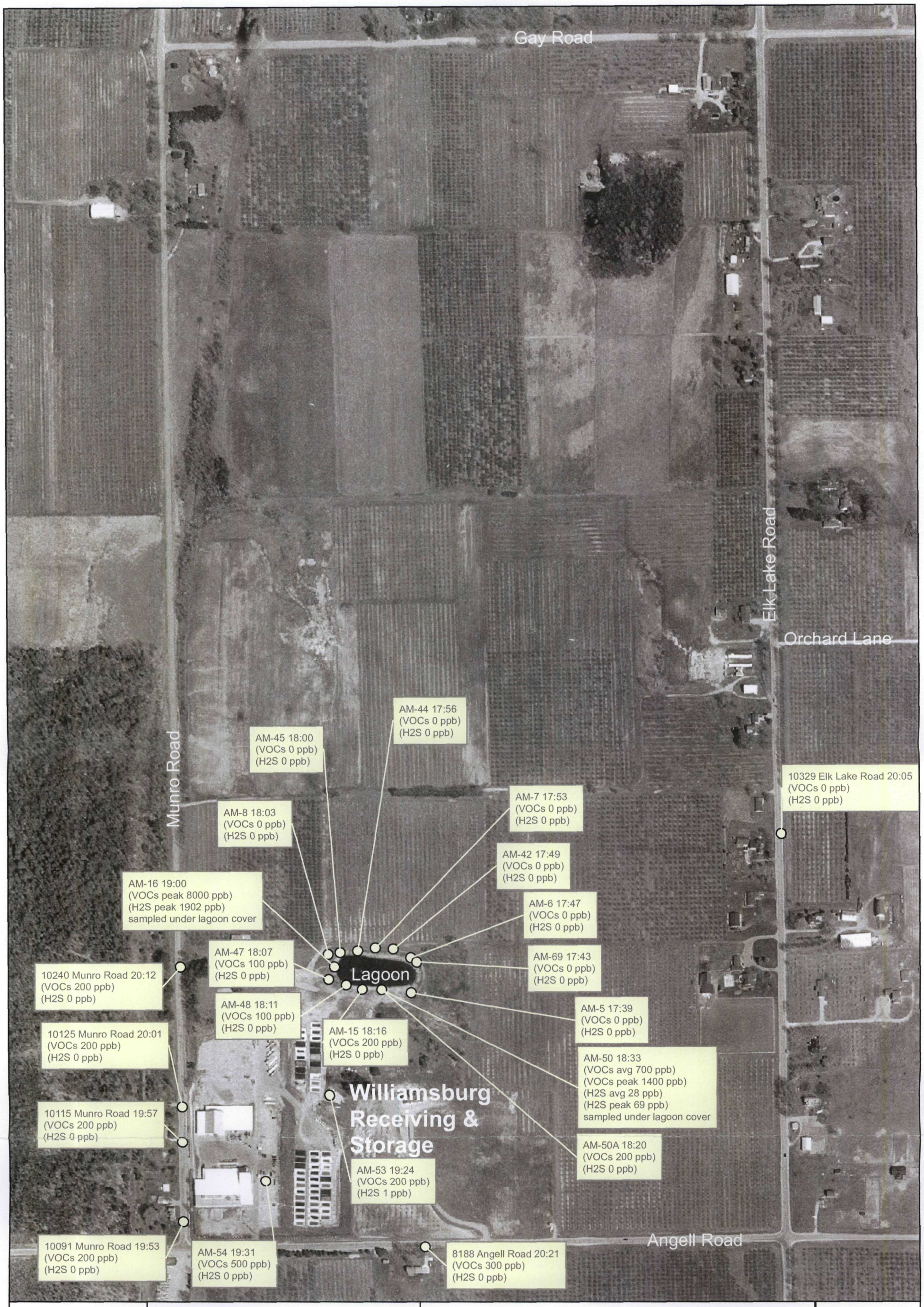
AM-8

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
11:39	East-northeast wind 10 mph. Pungent, putrid odor; can taste in mouth. Odor is persistent. Eyes watering. Measurements collected ~ 5 minutes after peroxide addition.	12.0	57.0	1812	1813

AM-80

Time	Notes	VOCs - Average	VOCs - Peak	H2S - Average	H2S - Peak
14:20	Background location (Yuba Park off Hwy 31). Winds northwest 5-10 mph.	0.0	0.0	2	5

FIGURES



N

S

0 200 400

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS (AVERAGE VALUES)
APRIL 6, 2006

FIGURE 1

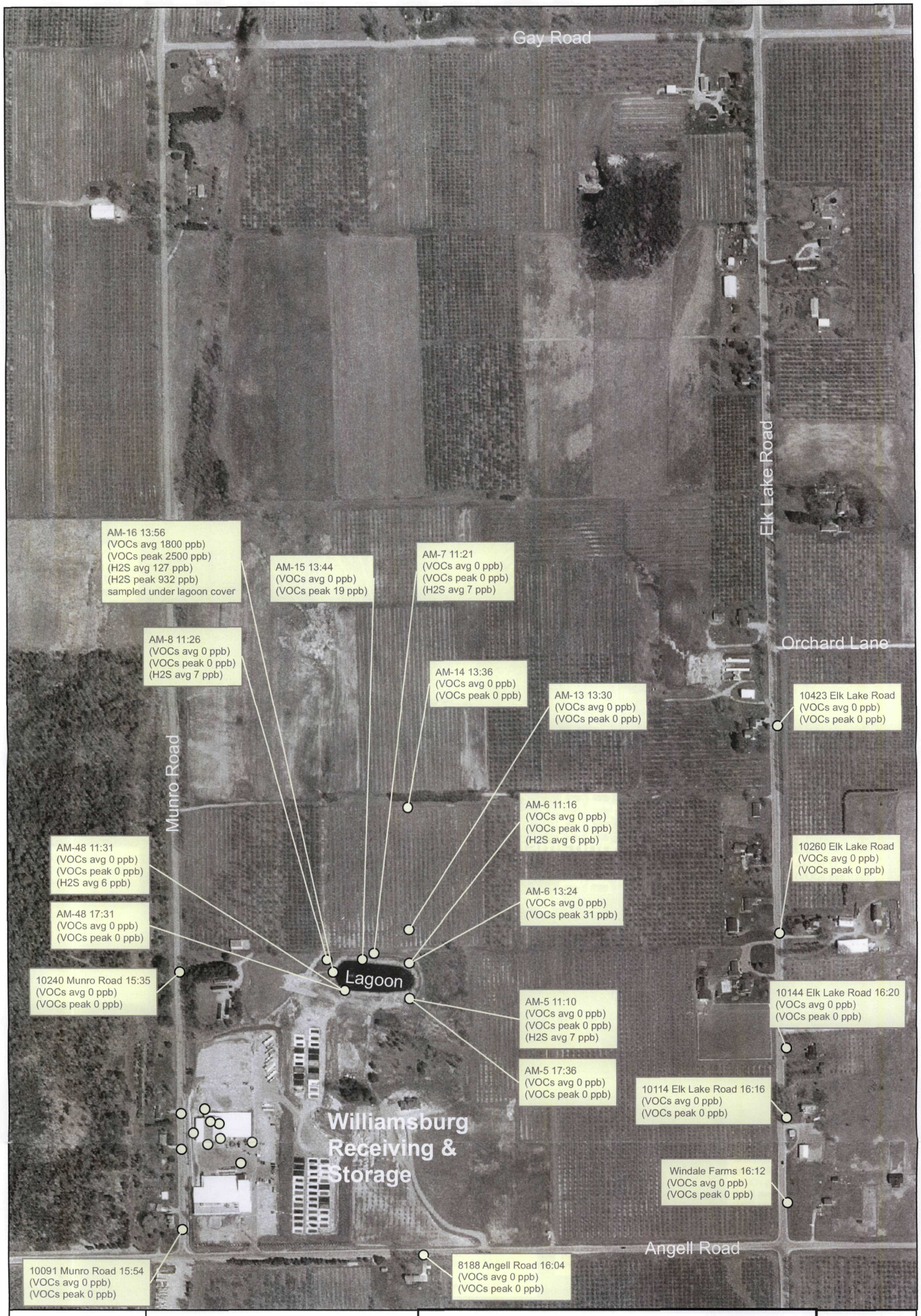
Drafted by: P. Lepczyk
Date: 4-19-2006
File: P:\wes0504\eng\gis\air_mon_4-6-2006

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-6-06rev.mxd

Legend

○ Air Monitoring Locations (Samples obtained from breathing zone, unless noted otherwise.)

GRT INC.



N

S

0 200 400

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS (REGIONAL)
APRIL 10, 2006

FIGURE 2

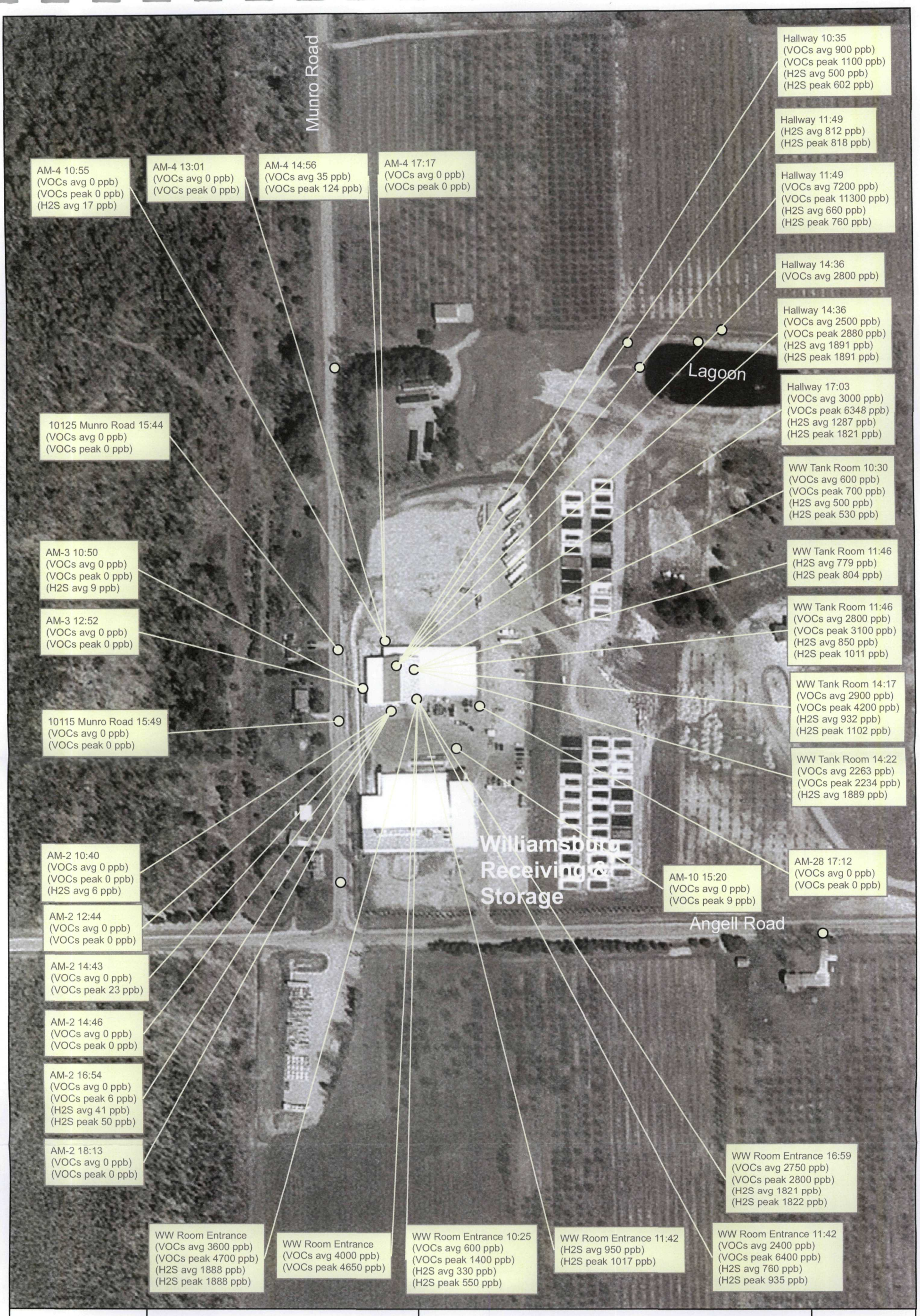
Drafted by: P. Lepczyk
Date: 4-20-2006
File: P:\wes0504\eng\gis\air_mon_4-10-2006

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-10-06rev.mxd

Legend

○ Air Monitoring Locations
(Samples obtained from breathing zone, unless noted otherwise.)

GRT INC.



N

S

0 100 200

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS (NEAR WW BUILDING)
APRIL 10, 2006

FIGURE 3

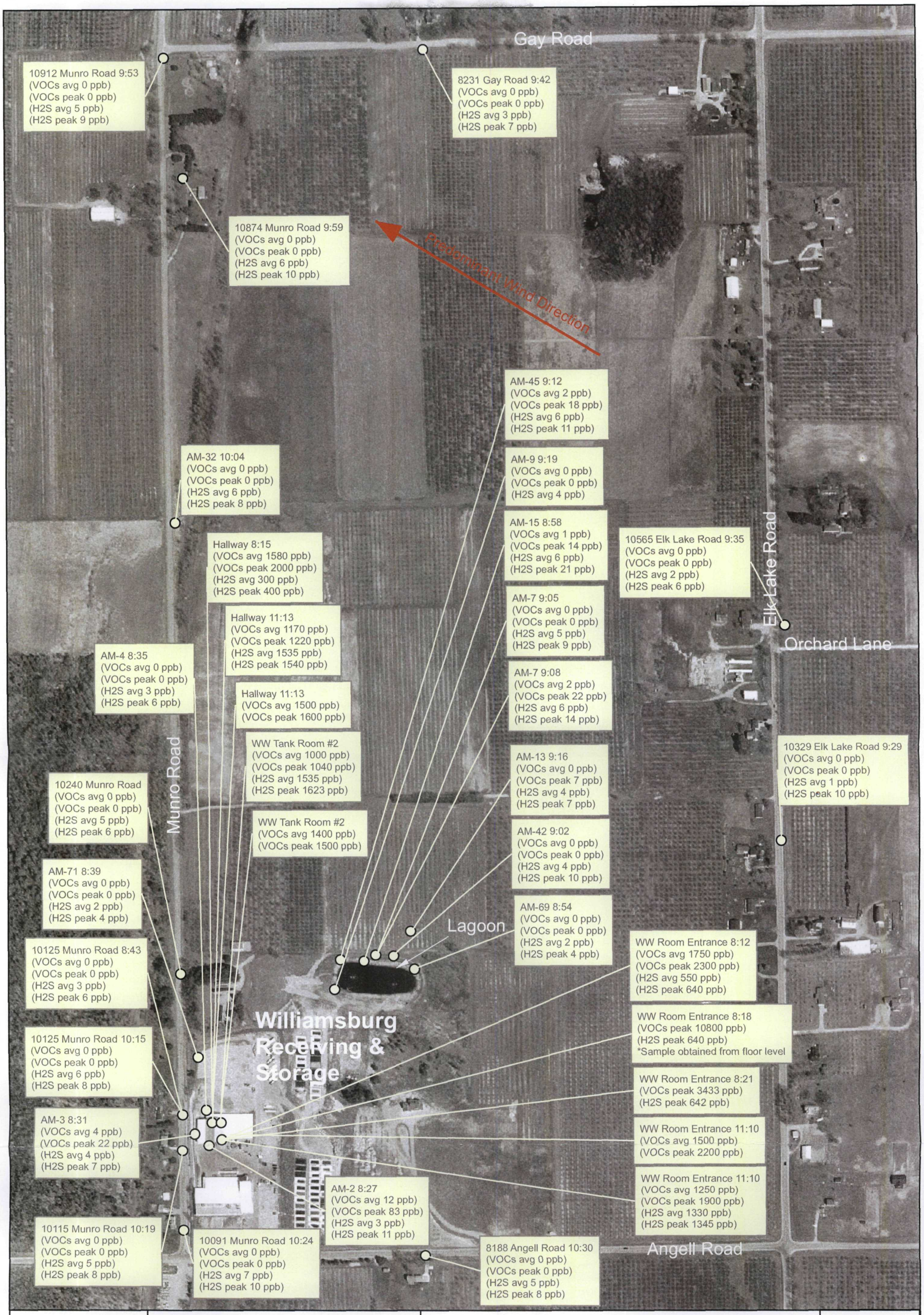
Drafted by: P. Lepczyk
Date: 4-20-2006
File: P:\wes0504\eng\gis\air_mon_4-10-06_bldg

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-10-06bldrev.

Legend

○ Air Monitoring Locations
(Samples obtained from breathing zone, unless noted otherwise.)

GRT INC.



N

S

0 200 400

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS
APRIL 11, 2006

FIGURE 4

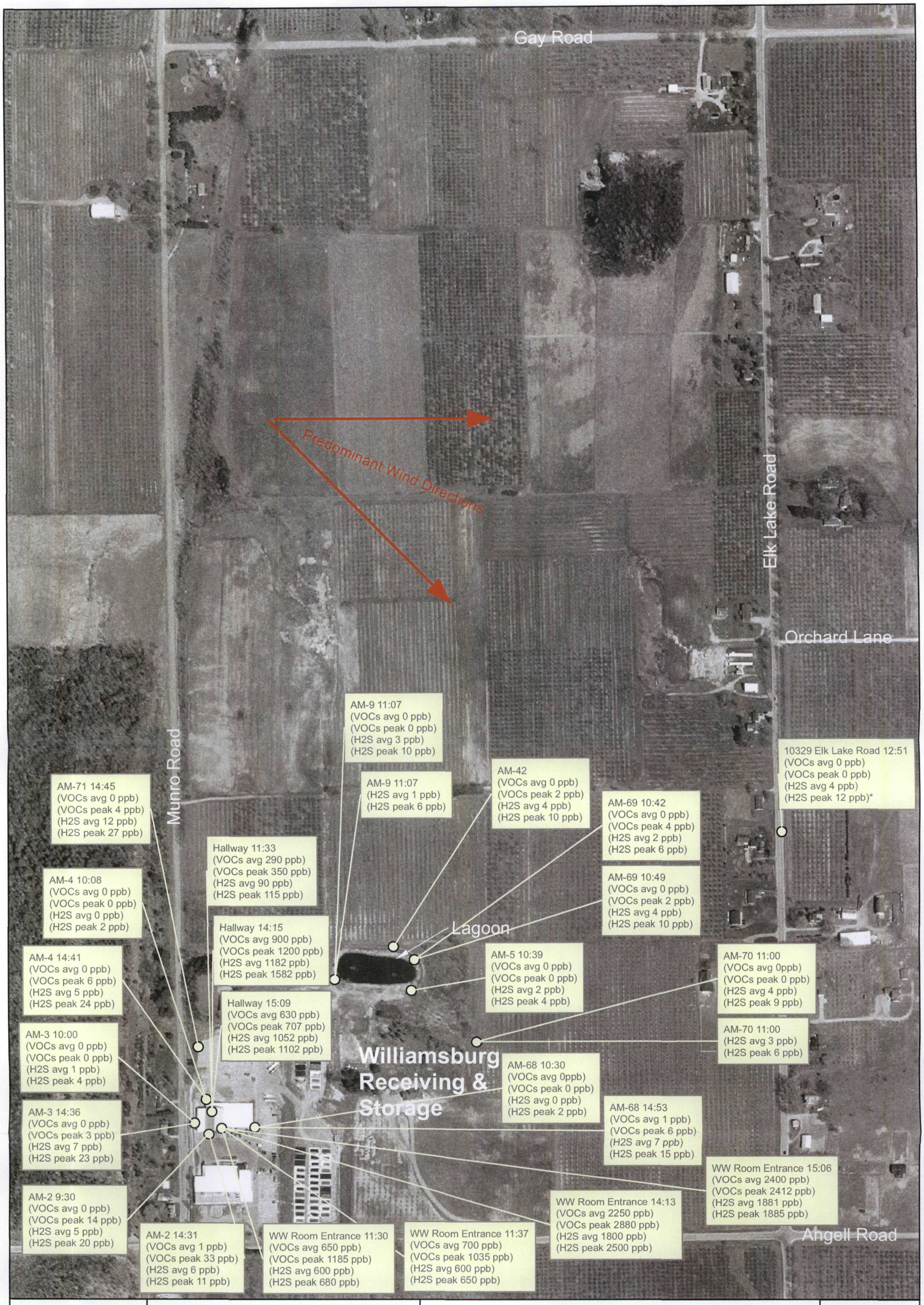
Drafted by: P. Lepczyk
Date: 4-19-2006
File: P:\wes0504\eng\gis\air_mon_4-11-2006

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-11-06rev.mxd

Legend

○ Air Monitoring Locations
(Samples obtained from breathing zone, unless noted otherwise.)

GRT INC.



N

S

0 200 400

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS
APRIL 13, 2006

FIGURE 5

Drafted by: P. Lepczyk
Date: 4-19-2006
File: P:\wes0504\eng\gis\air_mon_4-13-2006

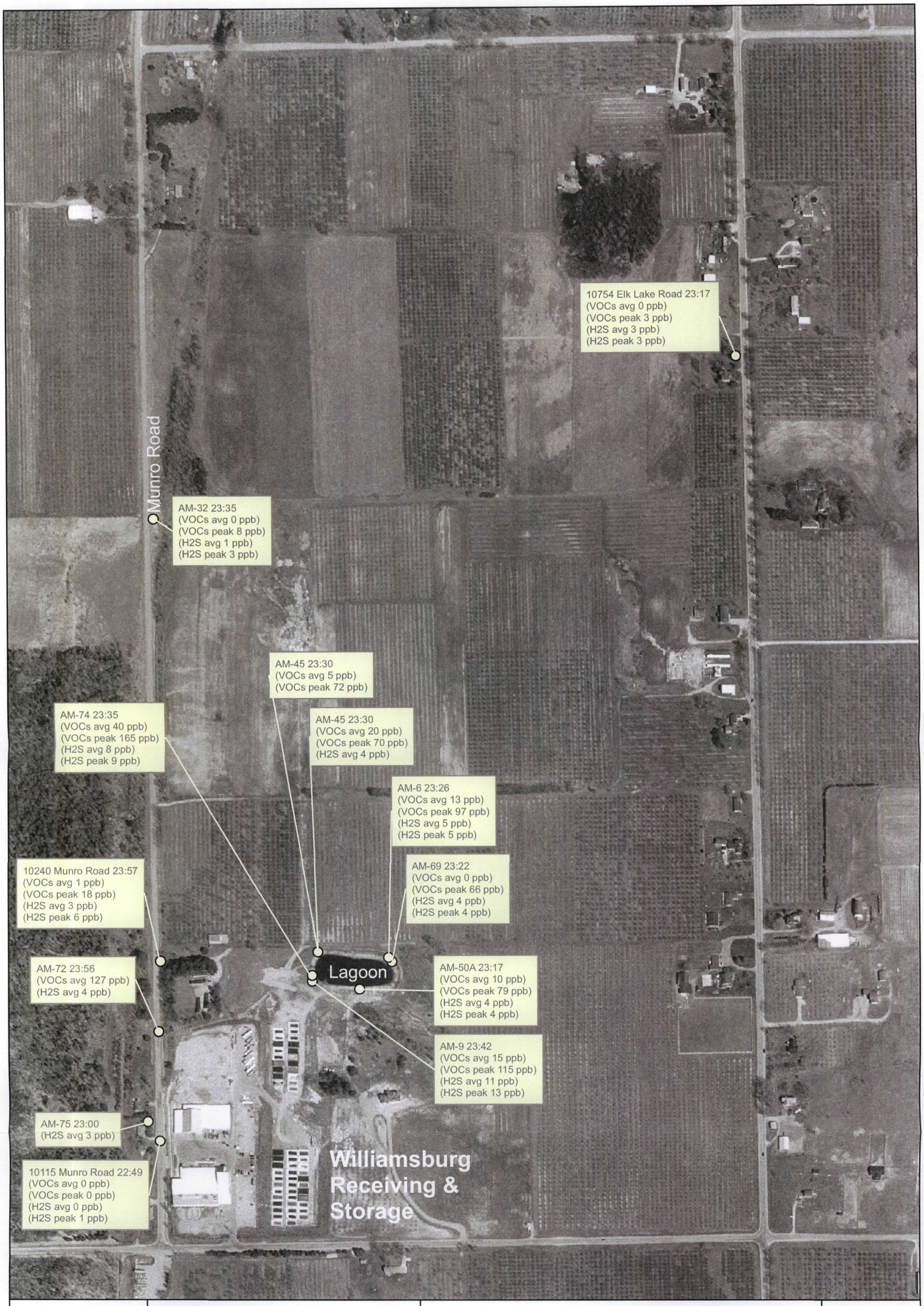
Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00_WRS\..4-13-06rev.mxd

Legend

○ Air Monitoring Locations

* Increase correlated with truck traffic. (Samples obtained from breathing zone, unless noted otherwise.)

GRT INC.



N

S

0 200 400

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS
APRIL 15, 2006

FIGURE 6

Drafted by: P. Lepczyk
Date: 4-20-2006
File: P:\wes0504\eng\gis\air_mon_4-15-2006

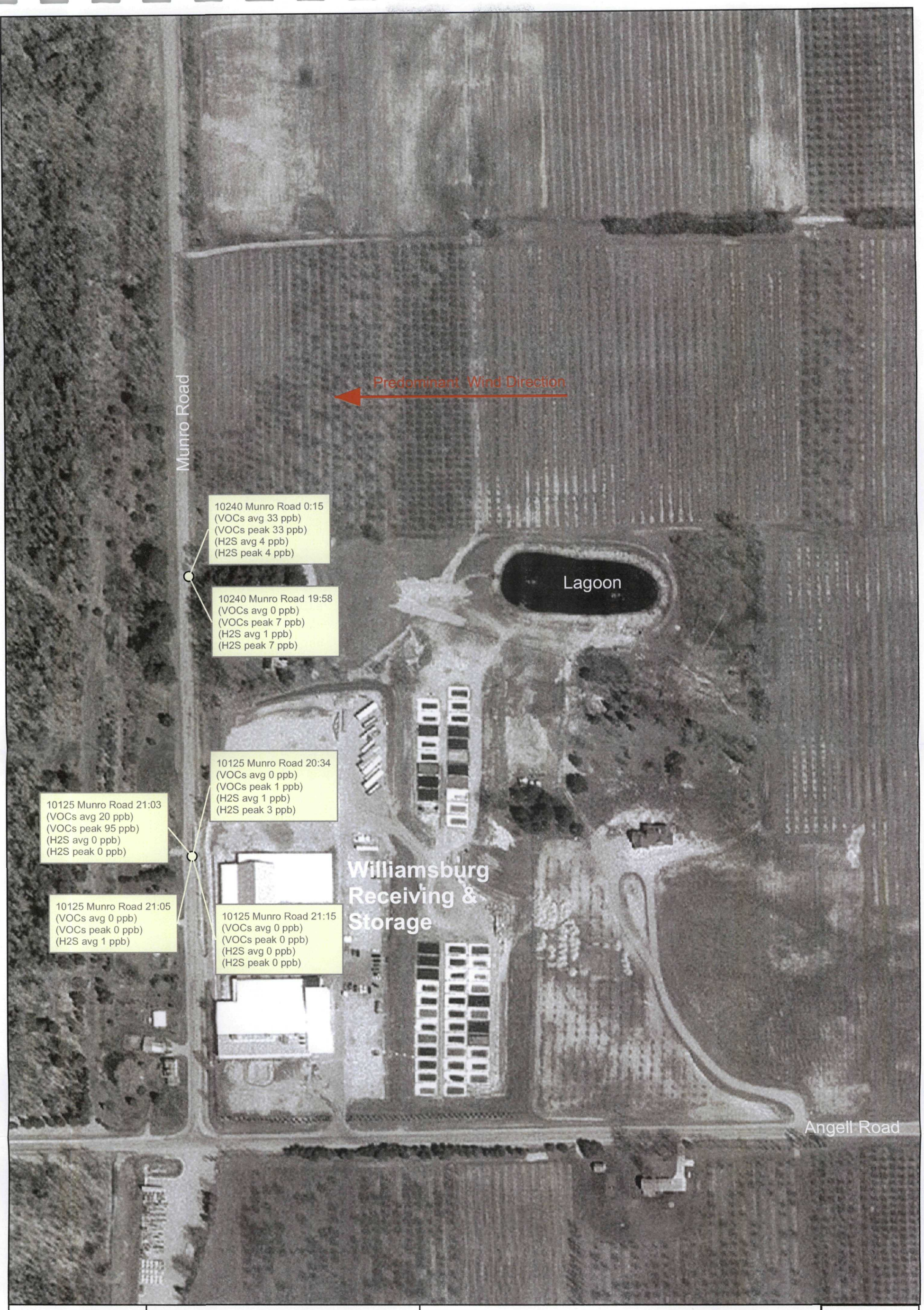
Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-15-06rev.mxd

Legend

○ Air Monitoring Locations
(Samples obtained from breathing zone, unless otherwise noted.)

Note: No wind was observed during monitoring.

GRT INC.



N

S

0 100 200

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS
APRIL 16, 2006

FIGURE 7

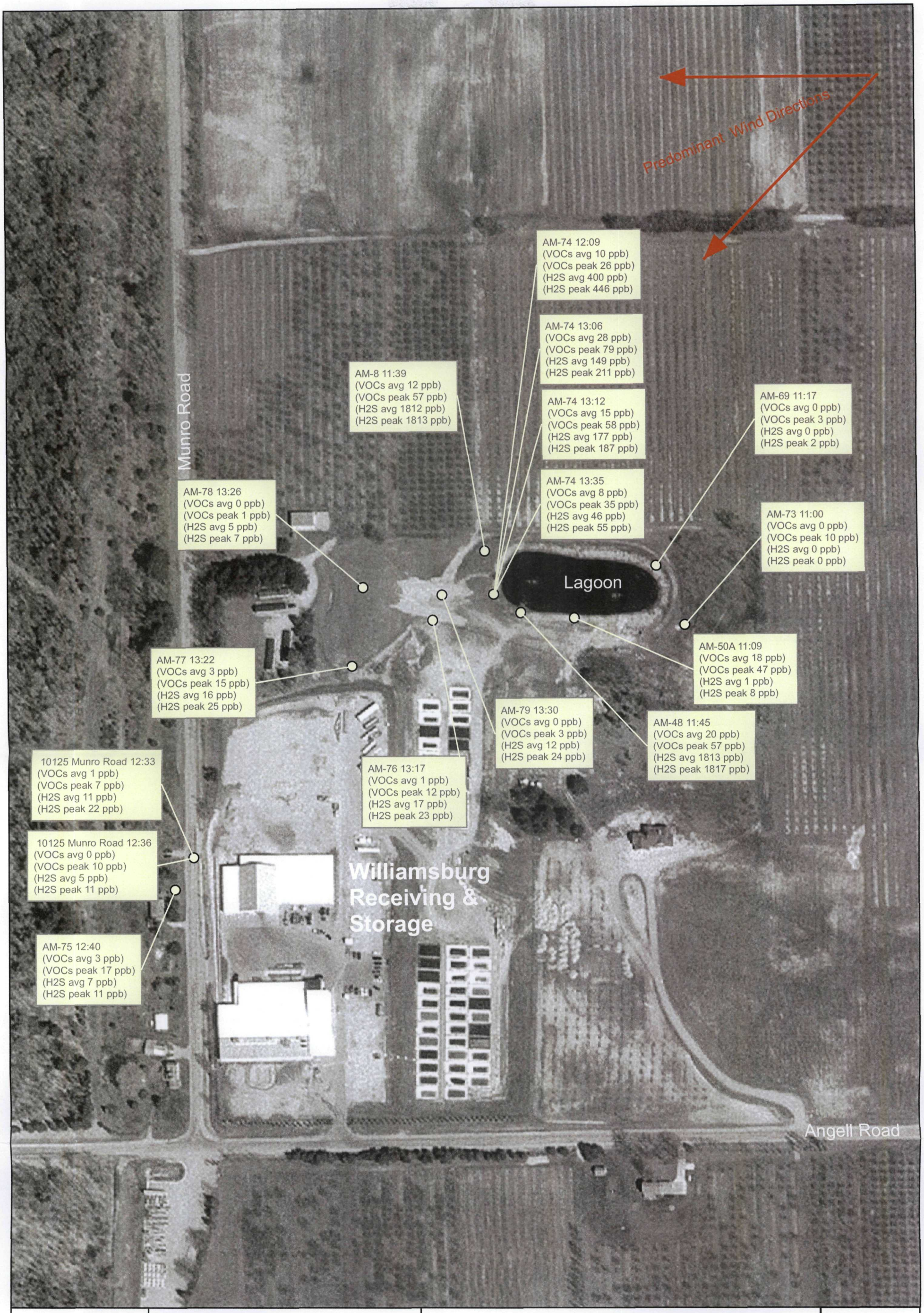
Drafted by: P. Lepczyk
Date: 4-20-2006
File: P:\wes0504\eng\gis\air_mon_4-16-2006

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-16-06rev.mxd

Legend

O Air Monitoring Locations
(Samples obtained from breathing zone, unless otherwise noted.)

GRT INC.



N

S

0 100 200

Feet

WILLIAMSBURG RECEIVING AND STORAGE
WILLIAMSBURG, MI

AIR MONITORING RESULTS
APRIL 17, 2006

FIGURE 8

Drafted by: P. Lepczyk
Date: 4-19-2006
File: P:\wes0504\eng\gis\air_mon_4-17-2006

Revised by: K. Brown (Weston Solutions)
Date: 5-24-2006
File:G\GIS\12634.001.001.0547.00 WRS\..4-6-06rev.mxd

Legend

○ Air Monitoring Locations
(Samples obtained from breathing zone, unless otherwise noted.)

GRT INC.

ATTACHMENT 1

Summary of Detected Compounds
Williamsburg Receiving and Storage
Williamsburg, Michigan

Sample No:						W-1		L-1	
Sample Date:						4/13/2006		4/17/2006	
Location						Maintaince Building		Lagoon Perimeter	
Compound	U.S. EPA REGION 9 PRGs µg/m³	MDEQ/RRD AIACs Residential µg/m³	MDEQ/RRD AIACs Industrial µg/m³	MDEW/AQD ITSL µg/m³	MDEW/AQD IRSL µg/m³	Result µg/m³	MRL µg/m³	Result µg/m³	MRL µg/m³
REDUCED SULPHUR COMPOUNDS									
Hydrogen Sulfide	1.0	NA	NA	2.0/24 hr. avg.	NA	**1,400**	9.3	ND	10
Methyl Mercaptan	2.1	NA	NA	10/1 hr. avg.	NA	**26**	13	ND	14
VOLATILE ORGANIC COMPOUNDS									
Dichlorodifluoromethane (CFC 12)	210	52,000	74,000	49,500/8 hr. avg	NA	ND	17	3.1	2.9
Ethanol	NA	NA	NA	19,000/ 8 hr. avg	NA	29,000	83	470	15
n-Hexane	210	210	300	700/ 24 hr. avg.	NA	24	17	ND	2.9
Toluene	400	420	600	5,000/ 24 hr. avg.	NA	75	17	3.6	2.9
Ethylbenzene	1100	79	320	1,000/ 24 hr. avg.	3/annual avg	20	17	ND	2.9
m,p -Xylenes	110 (totals)	4,600 (totals)	6,600 (total)	100 (total)/24 hr. avg	NA	68	17	ND	2.9
o-Xylene	110 (totals)	4,600 (totals)	6,600 (total)	100 (total)/24 hr. avg	NA	23	17	ND	2.9
n-Nonane	NA	NA	NA	550/24 hr. avg.	NA	61	17	ND	2.9
1,2,4-Trimethylbenzene	6	1,300	1,800	1,230/ 8 hr. avg	NA	**20**	17	ND	2.9
d-Limonene	NA	NA	NA	NA	NA	810	17	ND	2.9
AMINE COMPOUNDS						ND	1.8 to 4.1	ND	1.9 to 4.1
CARBOXYLIC ACIDS COMPOUNDS									
Acetic Acid	NA	NA	NA	250/ 8 hr. avg	NA	170	11	20	11
Propanoic Acid (Propionic)	NA	NA	NA	300/ 8 hr. avg.	NA	14	2.7	ND	2.6
2-Methylpropanoic Acid (Isobutyric)	NA	NA	NA	0.9/ annual avg.	NA	**5.9**	2.6	ND	2.6
Butanoic Acid (Butyric)	NA	NA	NA	NA	NA	120	2.6	34	2.6
2-Methyl Butanoic Acid	NA	NA	NA	NA	NA	18	2.5	5.5	2.5
Pentanoic Acid (Valeric)	NA	NA	NA	NA	NA	37	2.5	13	2.5
Hexanoic Acid (Caproic)	NA	NA	NA	NA	NA	28	2.4	9.9	2.4
Heptanoic Acid	NA	NA	NA	NA	NA	10	2.6	3.8	2.6
Octanoic Acid (Caprylic)	NA	NA	NA	33/ annual avg	NA	14	2.5	3.9	2.5
Nonanoic Acid	NA	NA	NA	NA	NA	3.7	2.6	ND	2.6

All compounds were detected below their respective NIOSH and OSHA exposure limits
PRGs - Preliminary Remediation Goals
MDEQ/RRD - Michigan Department of Environmental Quality - Remediation and Redevelopment Division
AIACs - Part 201/213 Acceptable Indoor Air Concentrations
MDEQ/AQD - Michigan Department of Environmental Quality - Air Quality Division
ITSL - Intial Threshold Screening Level
IRSL - Intial Risk Screening Level
µg/m³ - micrograms per cubic meter
MRL - Method Reporting Limit
NA- not available
xylene criteria are a summation of m-,p- and o- xylenes

2665 Park Center Drive, Suite D Simi Valley, California 96065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 18, 2006

Mr. Ted LaMarre
Weston Solutions of Michigan, Inc.
2501 Jolly Road, Suite 100
Okemos, MI 48864

RE: P2600955
WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00

Dear Mr. LaMarre:

Enclosed are the results of the sample(s) submitted to our laboratory on April 14, 2006. For your reference, these analyses have been assigned our service request number P2600955.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 21 pages.

Columbia Analytical Services is certified by the California Department of Health Services, Certificate No. 2380; Arizona Department of Health Services, Certificate No. AZ0550; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661. Please contact me for specific method(s) and analyte(s) corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

2665 Park Center Drive, Suite D Simi Valley, California 96065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

Client:	WESTON SOLUTIONS OF MICHIGAN, INC.	Date of Report:	04/18/06
Address:	2501 Jolly Road, Suite 100	Date Received:	04/14/06
	Okemos, MI 48864	CAS Project No:	P2600955
Contact:	Mr. Ted LaMarre	Purchase Order:	Verbal

Client Project ID: WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00

One (1) Stainless Steel Silco Canister labeled:	"W-1"	
Two (2) Silica Gel Tubes labeled:	"W-1"	"Field Blank"
Two (2) Treated Alumina Tube Samples labeled:	"W-1"	"Field Blank"

The samples were received at the laboratory under chain of custody on April 14, 2006. The client requested and received one day rush results. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

Sulfur Analysis

The Silco canister sample was analyzed for twenty sulfur compounds per ASTM D 5504-01 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan.

Amines Analysis

The Treated alumina tube samples were analyzed for amines utilizing a gas chromatograph (GC) equipped with a nitrogen phosphorus detector (NPD).

Reviewed and Approved:

Madeleine Dangazyan
GC-SV Team Leader
Air Quality Laboratory

Reviewed and Approved:

Chris Parnell
GCMS-VOA Team Leader
Air Quality Laboratory

2665 Park Center Drive, Suite D Simi Valley, California 96065 (805) 526-7161 (805) 526-7270 fax

CAS Project No: P2600955

Carboxylic Acid Analysis

The Silica gel tube samples were analyzed for carboxylic acids using combined gas chromatography/mass spectrometry (GC/MS). The analyses were performed using a Hewlett Packard Model 5890 Series II gas chromatograph/Model 5970 mass selective detector.

Volatile Organic Compound Analysis

The Silco canister sample was also analyzed by combined gas chromatography/mass spectrometry (GC/MS) for selected volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001

Test Code: ASTM D 5504-01 Date Collected: 4/13/06
Instrument ID: Agilent 6890A/GC13/SCD Time Collected: 15:04
Analyst: Zheng Wang Date Received: 4/14/06
Sampling Media: Silco Canister Date Analyzed: 4/14/06
Test Notes: Time Analyzed: 10:59
Container ID: SL00084 Volume(s) Analyzed: 1.0 ml(s)

Pi 1 = -1.0 Pf 1 = 3.5

D.F.= 1.33

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**1,400**	9.3	**990**	6.6	
463-58-1	Carbonyl Sulfide	ND	16	ND	6.6	
74-93-1	Methyl Mercaptan	**26**	13	**13**	6.6	
75-08-1	Ethyl Mercaptan	ND	17	ND	6.6	
75-18-3	Dimethyl Sulfide	ND	17	ND	6.6	
75-15-0	Carbon Disulfide	ND	10	ND	3.3	
75-33-2	Isopropyl Mercaptan	ND	21	ND	6.6	
75-66-1	tert-Butyl Mercaptan	ND	24	ND	6.6	
107-03-9	n-Propyl Mercaptan	ND	21	ND	6.6	
624-89-5	Ethyl Methyl Sulfide	ND	21	ND	6.6	
110-02-1	Thiophene	ND	23	ND	6.6	
513-44-0	Isobutyl Mercaptan	ND	24	ND	6.6	
352-93-2	Diethyl Sulfide	ND	24	ND	6.6	
109-79-5	n-Butyl Mercaptan	ND	24	ND	6.6	
624-92-0	Dimethyl Disulfide	ND	13	ND	3.3	
616-44-4	3-Methylthiophene	ND	27	ND	6.6	
110-01-0	Tetrahydrothiophene	ND	24	ND	6.6	
638-02-8	2,5-Dimethylthiophene	ND	30	ND	6.6	
872-55-9	2-Ethylthiophene	ND	30	ND	6.6	
110-81-6	Diethyl Disulfide	ND	17	ND	3.3	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001DUP

Test Code: ASTM D 5504-01 Date Collected: 4/13/06
Instrument ID: Agilent 6890A/GC13/SCD Time Collected: 15:04
Analyst: Zheng Wang Date Received: 4/14/06
Sampling Media: Silco Canister Date Analyzed: 4/14/06
Test Notes: Time Analyzed: 11:22
Container ID: SL00084 Volume(s) Analyzed: 1.0 ml(s)

Pi 1 = -1.0 Pf 1 = 3.5

D.F.= 1.33

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**1,400**	9.3	**1,000**	6.6	
463-58-1	Carbonyl Sulfide	ND	16	ND	6.6	
74-93-1	Methyl Mercaptan	**26**	13	**13**	6.6	
75-08-1	Ethyl Mercaptan	ND	17	ND	6.6	
75-18-3	Dimethyl Sulfide	ND	17	ND	6.6	
75-15-0	Carbon Disulfide	ND	10	ND	3.3	
75-33-2	Isopropyl Mercaptan	ND	21	ND	6.6	
75-66-1	tert-Butyl Mercaptan	ND	24	ND	6.6	
107-03-9	n-Propyl Mercaptan	ND	21	ND	6.6	
624-89-5	Ethyl Methyl Sulfide	ND	21	ND	6.6	
110-02-1	Thiophene	ND	23	ND	6.6	
513-44-0	Isobutyl Mercaptan	ND	24	ND	6.6	
352-93-2	Diethyl Sulfide	ND	24	ND	6.6	
109-79-5	n-Butyl Mercaptan	ND	24	ND	6.6	
624-92-0	Dimethyl Disulfide	ND	13	ND	3.3	
616-44-4	3-Methylthiophene	ND	27	ND	6.6	
110-01-0	Tetrahydrothiophene	ND	24	ND	6.6	
638-02-8	2,5-Dimethylthiophene	ND	30	ND	6.6	
872-55-9	2-Ethylthiophene	ND	30	ND	6.6	
110-81-6	Diethyl Disulfide	ND	17	ND	3.3	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Silco Canister
Test Notes:

Date Collected: NA
Time Collected: NA
Date Received: NA
Date Analyzed: 4/14/06
Time Analyzed: 09:30
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-LCS

Laboratory Control Sample Summary

Test Code: ASTM D 5504-01 Date Sampled: NA
Instrument ID: Agilent 6890A/GC13/SCD Date Received: NA
Analyst: Zheng Wang Date Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: NA
Test Notes:

Compound	Spike Amount LCS ppbV	Result LCS ppbV	% Recovery LCS	CAS Acceptance Limits
Hydrogen Sulfide	1,980	1,740	88	70-129
Carbonyl Sulfide	2,130	1,980	93	80-138
Methyl Mercaptan	2,080	2,020	97	78-128

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1**
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00**

CAS Project ID: P2600955
CAS Sample ID: P2600955-001B

Test Code: GC/NPD
Instrument ID: Agilent 6890N/GC14/NPD
Analyst: Madeleine Dangazyan
Sampling Media: Treated Alumina Tube
Test Notes: **BC, DE**

Date Collected: 4/13/06
Date Received: 4/14/06
Date Analyzed: 4/14/06
Desorption Volume: 2.0 ml
Volume Sampled: 102.15 Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	ND	2.0	ND	1.1	
75-04-7	Ethylamine	< 0.22	ND	2.2	ND	1.2	
75-50-3	Trimethylamine	< 0.19	ND	1.8	ND	0.76	
75-31-0	Isopropylamine	< 0.20	ND	2.0	ND	0.82	
75-64-9	t-Butylamine	< 0.21	ND	2.0	ND	0.68	
107-10-8	Propylamine	< 0.20	ND	1.9	ND	0.80	
109-89-7	Diethylamine	< 0.21	ND	2.0	ND	0.67	
13952-84-6	s-Butylamine	< 0.20	ND	2.0	ND	0.66	
78-81-9	Isobutylamine	< 0.19	ND	1.9	ND	0.62	
109-73-9	Butylamine	< 0.20	ND	1.9	ND	0.64	
108-18-9	Diisopropylamine	< 0.21	ND	2.0	ND	0.50	
121-44-8	Triethylamine	< 0.21	ND	2.0	ND	0.49	
142-84-7	Dipropylamine	< 0.42	ND	4.1	ND	0.98	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: Ru Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Field Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-002

Test Code: GC/NPD
Instrument ID: Agilent 6890N/GC14/NPD
Analyst: Madeleine Dangazyan
Sampling Media: Treated Alumina Tube
Test Notes: **BC, DE**

Date Collected: 4/13/06
Date Received: 4/14/06
Date Analyzed: 4/14/06
Desorption Volume: 2.0 ml
Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	NA	NA	NA	NA	
75-04-7	Ethylamine	< 0.22	NA	NA	NA	NA	
75-50-3	Trimethylamine	< 0.19	NA	NA	NA	NA	
75-31-0	Isopropylamine	< 0.20	NA	NA	NA	NA	
75-64-9	t-Butylamine	< 0.21	NA	NA	NA	NA	
107-10-8	Propylamine	< 0.20	NA	NA	NA	NA	
109-89-7	Diethylamine	< 0.21	NA	NA	NA	NA	
13952-84-6	s-Butylamine	< 0.20	NA	NA	NA	NA	
78-81-9	Isobutylamine	< 0.19	NA	NA	NA	NA	
109-73-9	Butylamine	< 0.20	NA	NA	NA	NA	
108-18-9	Diisopropylamine	< 0.21	NA	NA	NA	NA	
121-44-8	Triethylamine	< 0.21	NA	NA	NA	NA	
142-84-7	Dipropylamine	< 0.42	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RG Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: GC/NPD
Instrument ID: Agilent 6890N/GC14/NPD
Analyst: Madeleine Dangazyan
Sampling Media: Treated Alumina Tube
Test Notes: **BC, DE**

Date Collected: NA
Date Received: NA
Date Analyzed: 4/14/06
Desorption Volume: 2.0 ml
Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	NA	NA	NA	NA	
75-04-7	Ethylamine	< 0.22	NA	NA	NA	NA	
75-50-3	Trimethylamine	< 0.19	NA	NA	NA	NA	
75-31-0	Isopropylamine	< 0.20	NA	NA	NA	NA	
75-64-9	t-Butylamine	< 0.21	NA	NA	NA	NA	
107-10-8	Propylamine	< 0.20	NA	NA	NA	NA	
109-89-7	Diethylamine	< 0.21	NA	NA	NA	NA	
13952-84-6	s-Butylamine	< 0.20	NA	NA	NA	NA	
78-81-9	Isobutylamine	< 0.19	NA	NA	NA	NA	
109-73-9	Butylamine	< 0.20	NA	NA	NA	NA	
108-18-9	Diisopropylamine	< 0.21	NA	NA	NA	NA	
121-44-8	Triethylamine	< 0.21	NA	NA	NA	NA	
142-84-7	Dipropylamine	< 0.42	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**

Client Sample ID: **Lab Control Sample** CAS Project ID : P2600955

Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-LCS

Laboratory Control Sample Summary

Test Code: GC/NPD Date Collected: NA

Instrument ID: Agilent 6890N/GC14/NPD Date Received: NA

Analyst: Madeleine Dangazyan Date Analyzed: 4/14/06

Sampling Media: Treated Alumina Tube Volume(s) Analyzed: NA

Test Notes:

Compound	Spike Amount LCS µg/ml	Result LCS µg/ml	% Recovery LCS	CAS Acceptance Limits	Data Qualifier
Dimethylamine	9.33	9.15	**98**	50-150	
Ethylamine	11.2	10.3	**92**	50-150	
Trimethylamine	7.44	7.67	**103**	50-150	
Isopropylamine	18.0	18.3	**102**	50-150	
t-Butylamine	9.26	9.40	**102**	50-150	
Propylamine	10.6	10.4	**98**	50-150	
Diethylamine	9.53	9.39	**99**	50-150	
s-Butylamine	10.2	10.4	**102**	50-150	
Isobutylamine	11.1	11.2	**100**	50-150	
Butylamine	12.8	12.8	**100**	50-150	
Diisopropylamine	12.1	12.4	**103**	50-150	
Triethylamine	10.9	11.0	**101**	50-150	
Dipropylamine	11.8	12.1	**102**	50-150	

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001C

Test Code: GC/MS Date Collected: 4/13/06
Instrument ID: HP5970/HP5890II+/MS4 Date Received: 4/14/06
Analyst: Wade Henton Date Analyzed: 4/14/06
Sampling Media: Silica Gel Tube Desorption Volume: 1.0 ml
Test Notes: **BC, DE** Volume Sampled: 99.5 Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	16	170	11	67	4.4	
79-09-4	Propanoic Acid (Propionic)	1.4	14	2.7	4.8	0.88	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	0.59	5.9	2.6	1.6	0.72	
107-92-6	Butanoic Acid (Butyric)	12	120	2.6	33	0.71	
116-53-0	2-Methyl Butanoic Acid	1.8	18	2.5	4.3	0.61	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	ND	2.6	ND	0.61	
109-52-4	Pentanoic Acid (Valeric)	3.7	37	2.5	9.0	0.60	
97-61-0	2-Methylpentanoic Acid	< 0.25	ND	2.5	ND	0.52	
105-43-1	3-Methylpentanoic Acid	< 0.25	ND	2.5	ND	0.53	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	ND	2.5	ND	0.52	
142-62-1	Hexanoic Acid (Caproic)	2.8	28	2.4	5.9	0.51	
149-57-5	2-Ethylhexanoic Acid	< 0.27	ND	2.7	ND	0.46	
111-14-8	Heptanoic Acid	1.0	10	2.6	1.9	0.50	
124-07-2	Octanoic Acid (Caprylic)	1.4	14	2.5	2.4	0.42	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	ND	2.5	ND	0.48	
112-05-0	Nonanoic Acid	0.37	3.7	2.6	0.57	0.40	
65-85-0	Benzoic Acid	< 0.30	ND	3.0	ND	0.61	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RL Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Field Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-002B

Test Code: GC/MS Date Collected: 4/13/06
Instrument ID: HP5970/HP5890II+/MS4 Date Received: 4/14/06
Analyst: Wade Henton Date Analyzed: 4/14/06
Sampling Media: Silica Gel Tube Desorption Volume: 1.0 ml
Test Notes: **BC, DE** Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	< 1.1	NA	NA	NA	NA	
79-09-4	Propanoic Acid (Propionic)	< 0.27	NA	NA	NA	NA	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	< 0.26	NA	NA	NA	NA	
107-92-6	Butanoic Acid (Butyric)	< 0.26	NA	NA	NA	NA	
116-53-0	2-Methyl Butanoic Acid	< 0.25	NA	NA	NA	NA	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	NA	NA	NA	NA	
109-52-4	Pentanoic Acid (Valeric)	< 0.25	NA	NA	NA	NA	
97-61-0	2-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
105-43-1	3-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	NA	NA	NA	NA	
142-62-1	Hexanoic Acid (Caproic)	< 0.24	NA	NA	NA	NA	
149-57-5	2-Ethylhexanoic Acid	< 0.27	NA	NA	NA	NA	
111-14-8	Heptanoic Acid	< 0.26	NA	NA	NA	NA	
124-07-2	Octanoic Acid (Caprylic)	< 0.25	NA	NA	NA	NA	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	NA	NA	NA	NA	
112-05-0	Nonanoic Acid	< 0.26	NA	NA	NA	NA	
65-85-0	Benzoic Acid	< 0.30	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: Rc Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: GC/MS
Instrument ID: HP5970/HP5890II+/MS4
Analyst: Wade Henton
Sampling Media: Silica Gel Tube
Test Notes: **BC, DE**

Date Collected: NA
Date Received: NA
Date Analyzed: 4/14/06
Desorption Volume: 1.0 ml
Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	< 1.1	NA	NA	NA	NA	
79-09-4	Propanoic Acid (Propionic)	< 0.27	NA	NA	NA	NA	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	< 0.26	NA	NA	NA	NA	
107-92-6	Butanoic Acid (Butyric)	< 0.26	NA	NA	NA	NA	
116-53-0	2-Methyl Butanoic Acid	< 0.25	NA	NA	NA	NA	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	NA	NA	NA	NA	
109-52-4	Pentanoic Acid (Valeric)	< 0.25	NA	NA	NA	NA	
97-61-0	2-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
105-43-1	3-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	NA	NA	NA	NA	
142-62-1	Hexanoic Acid (Caproic)	< 0.24	NA	NA	NA	NA	
149-57-5	2-Ethylhexanoic Acid	< 0.27	NA	NA	NA	NA	
111-14-8	Heptanoic Acid	< 0.26	NA	NA	NA	NA	
124-07-2	Octanoic Acid (Caprylic)	< 0.25	NA	NA	NA	NA	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	NA	NA	NA	NA	
112-05-0	Nonanoic Acid	< 0.26	NA	NA	NA	NA	
65-85-0	Benzoic Acid	< 0.30	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RG Date: 4/28/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID : P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-LCS

Laboratory Control Sample Summary

Test Code: GC/MS Date Collected: NA
Instrument ID: HP5970/HP5890II+/MS4 Date Received: NA
Analyst: Wade Henton Date Analyzed: 4/14/06
Sampling Media: Silica Gel Tube Volume(s) Analyzed: NA
Test Notes:

Compound	Spike Amount LCS µg/ml	Result LCS	% Recovery LCS	CAS Acceptance Limits	Data Qualifier
Acetic Acid	26.6	28.9	**109**	70-130	
Propanoic Acid (Propionic)	10.9	11.8	**108**	70-130	
2-Methylpropanoic Acid (Isobutyric)	12.7	13.3	**105**	70-130	
Butanoic Acid (Butyric)	12.5	12.9	**103**	70-130	
2-Methyl Butanoic Acid	12.4	12.9	**104**	70-130	
3-Methyl Butanoic Acid (Isovaleric)	12.1	12.4	**103**	70-130	
Pentanoic Acid (Valeric)	11.9	12.3	**104**	70-130	
2-Methylpentanoic Acid	12.3	12.3	**100**	70-130	
3-Methylpentanoic Acid	12.2	12.3	**101**	70-130	
4-Methylpentanoic Acid (Isocaproic)	12.0	12.1	**100**	70-130	
Hexanoic Acid (Caproic)	12.8	12.7	**99**	70-130	
2-Ethylhexanoic Acid	13.3	12.0	**90**	70-130	
Heptanoic Acid	13.1	12.6	**96**	70-130	
Octanoic Acid (Caprylic)	13.2	12.8	**97**	70-130	
Cyclohexanecarboxylic Acid	12.6	12.4	**98**	70-130	
Nonanoic Acid	13.2	12.5	**95**	70-130	
Benzoic Acid	13.1	10.8	**82**	70-130	

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001

Test Code: EPA TO-15 Date Collected: 4/13/06
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: 4/14/06
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 0.080 Liter(s)
Test Notes: 0.0025 Liter(s)
Container ID: SL00084

Pi 1 = -1.0 Pf 1 = 3.5
Can D.F. = 1.33

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	17	ND	3.4	
74-87-3	Chloromethane	ND	17	ND	8.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	17	ND	2.4	
75-01-4	Vinyl Chloride	ND	17	ND	6.5	
106-99-0	1,3-Butadiene	ND	17	ND	7.5	
74-83-9	Bromomethane	ND	17	ND	4.3	
75-00-3	Chloroethane	ND	17	ND	6.3	
64-17-5	Ethanol	**29,000**	83	**15,000**	44	
75-05-8	Acetonitrile	ND	17	ND	9.9	
107-02-8	Acrolein	ND	17	ND	7.3	
67-64-1	Acetone	ND	83	ND	35	
75-69-4	Trichlorofluoromethane	ND	17	ND	3.0	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	17	ND	6.8	
107-13-1	Acrylonitrile	ND	17	ND	7.7	
75-35-4	1,1-Dichloroethene	ND	17	ND	4.2	
75-09-2	Methylene chloride	ND	17	ND	4.8	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	17	ND	5.3	
76-13-1	Trichlorotrifluoroethane	ND	17	ND	2.2	
75-15-0	Carbon Disulfide	ND	17	ND	5.3	
156-60-5	trans-1,2-Dichloroethene	ND	17	ND	4.2	
75-34-3	1,1-Dichloroethane	ND	17	ND	4.1	
1634-04-4	Methyl tert-Butyl Ether	ND	17	ND	4.6	
108-05-4	Vinyl Acetate	ND	17	ND	4.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001

Test Code: EPA TO-15 Date Collected: 4/13/06
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: 4/14/06
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 0.080 Liter(s)
Test Notes: 0.0025 Liter(s)
Container ID: SL00084

Pi 1 = -1.0 Pf 1 = 3.5
Can D.F. = 1.33

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-93-3	2-Butanone (MEK)	ND	17	ND	5.6	
156-59-2	cis-1,2-Dichloroethene	ND	17	ND	4.2	
110-54-3	n-Hexane	**24**	17	**6.7**	4.7	
67-66-3	Chloroform	ND	17	ND	3.4	
107-06-2	1,2-Dichloroethane	ND	17	ND	4.1	
71-55-6	1,1,1-Trichloroethane	ND	17	ND	3.0	
71-43-2	Benzene	ND	17	ND	5.2	
56-23-5	Carbon Tetrachloride	ND	17	ND	2.6	
78-87-5	1,2-Dichloropropane	ND	17	ND	3.6	
75-27-4	Bromodichloromethane	ND	17	ND	2.5	
79-01-6	Trichloroethene	ND	17	ND	3.1	
123-91-1	1,4-Dioxane	ND	17	ND	4.6	
10061-01-5	cis-1,3-Dichloropropene	ND	17	ND	3.7	
108-10-1	4-Methyl-2-pentanone	ND	17	ND	4.1	
10061-02-6	trans-1,3-Dichloropropene	ND	17	ND	3.7	
79-00-5	1,1,2-Trichloroethane	ND	17	ND	3.0	
108-88-3	Toluene	**75**	17	**20**	4.4	
591-78-6	2-Hexanone	ND	17	ND	4.1	
124-48-1	Dibromochloromethane	ND	17	ND	2.0	
106-93-4	1,2-Dibromoethane	ND	17	ND	2.2	
123-86-4	n-Butyl Acetate	ND	17	ND	3.5	
127-18-4	Tetrachloroethene	ND	17	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RS Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **W-1** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P2600955-001

Test Code: EPA TO-15 Date Collected: 4/13/06
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: 4/14/06
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 0.080 Liter(s)
Test Notes: 0.0025 Liter(s)
Container ID: SL00084

Pi 1 = -1.0 Pf 1 = 3.5
Can D.F. = 1.33

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
108-90-7	Chlorobenzene	ND	17	ND	3.6	
100-41-4	Ethylbenzene	**20**	17	**4.6**	3.8	
179601-23-1	*m,p*-Xylenes	**68**	17	**16**	3.8	
75-25-2	Bromoform	ND	17	ND	1.6	
100-42-5	Styrene	ND	17	ND	3.9	
95-47-6	o-Xylene	**23**	17	**5.2**	3.8	
111-84-2	n-Nonane	**61**	17	**12**	3.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	17	ND	2.4	
98-82-8	Cumene	ND	17	ND	3.4	
80-56-8	alpha-Pinene	ND	17	ND	3.0	
622-96-8	4-Ethyltoluene	ND	17	ND	3.4	
108-67-8	1,3,5-Trimethylbenzene	ND	17	ND	3.4	
95-63-6	1,2,4-Trimethylbenzene	**20**	17	**4.0**	3.4	
100-44-7	Benzyl Chloride	ND	17	ND	3.2	
541-73-1	1,3-Dichlorobenzene	ND	17	ND	2.8	
106-46-7	1,4-Dichlorobenzene	ND	17	ND	2.8	
95-50-1	1,2-Dichlorobenzene	ND	17	ND	2.8	
5989-27-5	d-Limonene	**810**	17	**150**	3.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	17	ND	1.7	
120-82-1	1,2,4-Trichlorobenzene	ND	17	ND	2.2	
91-20-3	Naphthalene	ND	17	ND	3.2	
87-68-3	Hexachlorobutadiene	ND	17	ND	1.6	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	1.0	ND	0.20	
74-87-3	Chloromethane	ND	1.0	ND	0.48	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.0	ND	0.14	
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
106-99-0	1,3-Butadiene	ND	1.0	ND	0.45	
74-83-9	Bromomethane	ND	1.0	ND	0.26	
75-00-3	Chloroethane	ND	1.0	ND	0.38	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	1.0	ND	0.60	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25	
75-09-2	Methylene chloride	ND	1.0	ND	0.29	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.0	ND	0.32	
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25	
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28	
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
110-54-3	n-Hexane	ND	1.0	ND	0.28	
67-66-3	Chloroform	ND	1.0	ND	0.20	
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18	
71-43-2	Benzene	ND	1.0	ND	0.31	
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16	
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22	
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15	
79-01-6	Trichloroethene	ND	1.0	ND	0.19	
123-91-1	1,4-Dioxane	ND	1.0	ND	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18	
108-88-3	Toluene	ND	1.0	ND	0.27	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12	
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13	
123-86-4	n-Butyl Acetate	ND	1.0	ND	0.21	
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date(s) Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
108-90-7	Chlorobenzene	ND	1.0	ND	0.22	
100-41-4	Ethylbenzene	ND	1.0	ND	0.23	
179601-23-1	*m,p*-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	1.0	ND	0.097	
100-42-5	Styrene	ND	1.0	ND	0.23	
95-47-6	o-Xylene	ND	1.0	ND	0.23	
111-84-2	n-Nonane	ND	1.0	ND	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15	
98-82-8	Cumene	ND	1.0	ND	0.20	
80-56-8	alpha-Pinene	ND	1.0	ND	0.18	
622-96-8	4-Ethyltoluene	ND	1.0	ND	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ND	0.20	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ND	0.20	
100-44-7	Benzyl Chloride	ND	1.0	ND	0.19	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17	
5989-27-5	d-Limonene	ND	1.0	ND	0.18	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.13	
91-20-3	Naphthalene	ND	1.0	ND	0.19	
87-68-3	Hexachlorobutadiene	ND	1.0	ND	0.094	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Project ID: P2600955

Surrogate Spike Recovery Results

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Collected: 4/13/06
Analyst: Rusty Bravo Date Received: 4/14/06
Sampling Media: Silco Canister(s) Date Analyzed: 4/14/06
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P060414-MB	**107**	70-140	**95**	70-140	**98**	70-140	
Lab Control Sample	P060414-LCS	**122**	70-140	**95**	70-140	**98**	70-140	
W-1	P2600955-001	**120**	70-140	**94**	70-140	**100**	70-140	

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: NA Liter
Test Notes:

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	25.8	28.9	**112**	68-124	
74-87-3	Chloromethane	25.3	23.0	**91**	65-120	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.3	18.7	**71**	47-130	
75-01-4	Vinyl Chloride	25.8	24.4	**95**	67-127	
106-99-0	1,3-Butadiene	27.0	22.1	**82**	65-118	
74-83-9	Bromomethane	25.8	25.8	**100**	65-134	
75-00-3	Chloroethane	26.0	23.7	**91**	71-121	
64-17-5	Ethanol	24.0	23.7	**99**	66-133	
75-05-8	Acetonitrile	23.8	22.5	**95**	64-124	
107-02-8	Acrolein	23.5	19.5	**83**	61-121	
67-64-1	Acetone	27.3	23.6	**87**	62-113	
75-69-4	Trichlorofluoromethane	24.3	27.3	**113**	68-130	
67-63-0	2-Propanol (Isopropyl Alcohol)	24.8	23.2	**94**	72-119	
107-13-1	Acrylonitrile	24.5	23.1	**94**	71-129	
75-35-4	1,1-Dichloroethene	27.5	26.6	**97**	74-126	
75-09-2	Methylene chloride	27.3	25.1	**92**	68-120	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	25.5	19.8	**78**	61-128	
76-13-1	Trichlorotrifluoroethane	27.5	28.7	**104**	68-127	
75-15-0	Carbon Disulfide	25.0	24.9	**100**	69-126	
156-60-5	trans-1,2-Dichloroethene	26.8	27.6	**103**	76-124	
75-34-3	1,1-Dichloroethane	27.3	24.9	**91**	75-120	
1634-04-4	Methyl tert-Butyl Ether	27.0	28.8	**107**	68-123	
108-05-4	Vinyl Acetate	25.8	23.7	**92**	56-139	

Verified By: Rc Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P2600955
Client Project ID: **WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00** CAS Sample ID: P060414-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date Analyzed: 4/14/06
Sampling Media: Silco Canister Volume(s) Analyzed: NA Liter
Test Notes:

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
78-93-3	2-Butanone (MEK)	27.3	26.4	**97**	74-126	
156-59-2	cis-1,2-Dichloroethene	27.3	28.1	**103**	77-122	
110-54-3	n-Hexane	27.3	25.1	**92**	72-119	
67-66-3	Chloroform	28.5	30.6	**107**	75-119	
107-06-2	1,2-Dichloroethane	26.8	32.0	**120**	74-125	
71-55-6	1,1,1-Trichloroethane	27.0	33.2	**123**	75-129	
71-43-2	Benzene	27.0	24.9	**92**	69-118	
56-23-5	Carbon Tetrachloride	26.5	34.1	**129**	72-139	
78-87-5	1,2-Dichloropropane	26.8	25.3	**95**	75-122	
75-27-4	Bromodichloromethane	28.3	33.1	**117**	79-125	
79-01-6	Trichloroethene	28.3	28.7	**102**	74-123	
123-91-1	1,4-Dioxane	28.3	28.7	**102**	80-128	
10061-01-5	cis-1,3-Dichloropropene	25.8	26.6	**103**	81-126	
108-10-1	4-Methyl-2-pentanone	27.3	27.4	**101**	78-132	
10061-02-6	trans-1,3-Dichloropropene	28.8	31.4	**109**	80-130	
79-00-5	1,1,2-Trichloroethane	26.5	26.2	**99**	76-123	
108-88-3	Toluene	26.8	25.1	**94**	74-124	
591-78-6	2-Hexanone	27.0	27.8	**103**	77-140	
124-48-1	Dibromochloromethane	27.0	31.1	**115**	81-139	
106-93-4	1,2-Dibromoethane	26.5	26.7	**101**	77-133	
123-86-4	n-Butyl Acetate	25.8	25.0	**97**	71-146	
127-18-4	Tetrachloroethene	26.5	25.9	**98**	71-135	

Verified By: RC Date: 4/17/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: Weston Solutions of Michigan, Inc.
Client Sample ID: Lab Control Sample — CAS Project ID: P2600955
Client Project ID: WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00 — CAS Sample ID: P060414-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15 — Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 — Date Received: NA
Analyst: Rusty Bravo — Date Analyzed: 4/14/06
Sampling Media: Silco Canister — Volume(s) Analyzed: NA Liter
Test Notes:

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
108-90-7	Chlorobenzene	26.8	25.6	**96**	76-126	
100-41-4	Ethylbenzene	26.5	26.2	**99**	77-127	
179601-23-1	m,p-Xylenes	58.0	59.3	**102**	77-128	
75-25-2	Bromoform	29.5	32.6	**111**	77-143	
100-42-5	Styrene	26.5	26.1	**98**	71-139	
95-47-6	o-Xylene	28.3	28.6	**101**	76-128	
111-84-2	n-Nonane	26.3	24.9	**95**	73-131	
79-34-5	1,1,2,2-Tetrachloroethane	28.3	26.8	**95**	79-130	
98-82-8	Cumene	27.3	27.8	**102**	77-128	
80-56-8	alpha-Pinene	26.3	25.7	**98**	66-140	
622-96-8	4-Ethyltoluene	27.3	27.9	**102**	74-132	
108-67-8	1,3,5-Trimethylbenzene	26.5	27.1	**102**	72-134	
95-63-6	1,2,4-Trimethylbenzene	26.8	28.4	**106**	74-134	
100-44-7	Benzyl Chloride	26.5	29.6	**112**	72-174	
541-73-1	1,3-Dichlorobenzene	26.3	26.1	**99**	73-137	
106-46-7	1,4-Dichlorobenzene	27.0	26.8	**99**	71-136	
95-50-1	1,2-Dichlorobenzene	26.8	26.4	**99**	70-140	
5989-27-5	d-Limonene	26.0	24.0	**92**	20-202	
96-12-8	1,2-Dibromo-3-chloropropane	25.8	26.9	**104**	77-157	
120-82-1	1,2,4-Trichlorobenzene	28.3	28.2	**100**	68-154	
91-20-3	Naphthalene	25.8	26.1	**101**	63-160	
87-68-3	Hexachlorobutadiene	27.5	28.0	**102**	61-147	

Verified By: RG Date: 4/17/06

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Weston Solutions of Michigan, Inc. Work order: P2600955

Project: WRS/TDD# 505-0512-001 / Task # 12634.001.001.0574.00

Sample(s) received on: 4/14/06 Date opened: 4/14/06 by: MZ

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☒	☐	☐
	Do they contain moisture?	☐	☒	☐
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH (as received, if required)	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2600955-001			NA	
P2600955-001B			NA	
P2600955-001C			NA	
P2600955-002			NA	
P2600955-002B			NA	

Explain any discrepancies: (include lab sample ID numbers):

Columbia Analytical Services INC

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record & Analytical Service Request

Page 1 of 1

Requested Turnaround Time by Close of Business Day (Surcharges) Please Circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (15%) 10 Day-Standard

CAS Project No. P2600455

CAS Contact:

Reporting Information (Company Name & Address)
Weston
Okemos MI

Attention: Ted La Marre

Phone (517) 381 5920 Fax

Email Address for Result Reporting

P.O. # / Billing Information

Project Name WRS

Project Number TOD # 505-0512-001
Task # 12634.001.001.6574.00

Sampler (Print & Sign) Adam Segerlind

Analysis Method and/or Analytes

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Sample Type (Air/Liquid /Solid/Tube)	Canister ID (Bar Code#)	Flow Controller (Bar Code #)	Sample Volume	Reduced Sulfer ASTM D5504	USEPA TO15	Amines (SOP 502)	Carboxy/12 Acids (SOP 503)	Comments e.g. Preservative or specific instructions
W-1	4/13/06	1504	1	Air	1071	35-1,5-005		X	X			24hr TAT*
W-1	4/13/06	1512		Air						X	X	
Field Blank	4/13/06	~~1537~~	2							X	X	Collected @ 1337

Report Tier Levels - please select
Tier I - (default if not specified) ____
Tier II (QC forms) X
Tier III (QC, Raw Data, Spectra) 10% Surcharge ____
Other ____
EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)
*24hr TAT on all samples
send via email to nposavatz@grtusa.com

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/13/06	1630	FedEx		
Relinquished by: (Signature) Fedex	Date:	Time:	Received by: (Signature)	Date: 4/14/06	Time: 0920
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C 0.6 0.0

27

2665 Park Center Drive, Suite D Simi Valley, California 96065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 20, 2006

RECEIVED
MAY 02 2006
Weston Solutions, Inc.
of Michigan

Mr. Ted LaMarre
Weston Solutions of Michigan, Inc.
2501 Jolly Road, Suite 100
Okemos, MI 48864

RE: P2600986
WRS

Dear Mr. LaMarre:

Enclosed are the results of the sample(s) submitted to our laboratory on April 18, 2006.
For your reference, these analyses have been assigned our service request number P2600986.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 26 pages.

Columbia Analytical Services is certified by the California Department of Health Services, Certificate No. 2380; Arizona Department of Health Services, Certificate No. AZ0550; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661. Please contact me for specific method(s) and analyte(s) corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

2665 Park Center Drive, Suite D Simi Valley, California 96065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

Client:	WESTON SOLUTIONS OF MICHIGAN, INC.	Date of Report:	04/20/06
Address:	2501 Jolly Road, Suite 100	Date Received:	04/18/06
	Okemos, MI 48864	CAS Project No:	P2600986
Contact:	Mr. Ted LaMarre	Purchase Order:	Verbal

Client Project ID: WRS

One (1) Stainless Steel Silco Canister labeled:	"L-1"	
Two (2) Silica Gel Tubes labeled:	"L-1"	"Field Blank"
Two (2) Treated Amine Tube Samples labeled:	"L-1"	"Field Blank"

The samples were received at the laboratory under chain of custody on April 18, 2006. The client requested and received one day rush results. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

Sulfur Analysis

The Silco canister sample was analyzed for twenty sulfur compounds per ASTM D 5504-01 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan.

Amines Analysis

The Treated alumina tube samples were analyzed for amines utilizing a gas chromatograph (GC) equipped with a nitrogen phosphorus detector (NPD).

Reviewed and Approved:

Chris Parnell
GCMS-VOA Team Leader
Air Quality Laboratory

Reviewed and Approved:

John Yokoyama
Operations Manager
Air Quality Laboratory

CAS Project No: P2600986

Carboxylic Acid Analysis

The Silica gel tube samples were analyzed for carboxylic acids using combined gas chromatography/mass spectrometry (GC/MS). The analyses were performed using a Hewlett Packard Model 5890 Series II gas chromatograph/Model 5970 mass selective detector.

Volatile Organic Compound Analysis

The Silco canister sample was also analyzed by combined gas chromatography/mass spectrometry (GC/MS) for selected volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: L-1
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P2600986-001C

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Silco Canister
Test Notes:
Container ID: SL00092

Date Collected: 4/17/06
Time Collected: 13:39
Date Received: 4/18/06
Date Analyzed: 4/18/06
Time Analyzed: 13:18
Volume(s) Analyzed: 1.0 ml(s)

Pi 1 = -1.2 Pf 1 = 5.1

D.F.= 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	10	ND	7.3	
463-58-1	Carbonyl Sulfide	ND	18	ND	7.3	
74-93-1	Methyl Mercaptan	ND	14	ND	7.3	
75-08-1	Ethyl Mercaptan	ND	19	ND	7.3	
75-18-3	Dimethyl Sulfide	ND	19	ND	7.3	
75-15-0	Carbon Disulfide	ND	11	ND	3.7	
75-33-2	Isopropyl Mercaptan	ND	23	ND	7.3	
75-66-1	tert-Butyl Mercaptan	ND	27	ND	7.3	
107-03-9	n-Propyl Mercaptan	ND	23	ND	7.3	
624-89-5	Ethyl Methyl Sulfide	ND	23	ND	7.3	
110-02-1	Thiophene	ND	25	ND	7.3	
513-44-0	Isobutyl Mercaptan	ND	27	ND	7.3	
352-93-2	Diethyl Sulfide	ND	27	ND	7.3	
109-79-5	n-Butyl Mercaptan	ND	27	ND	7.3	
624-92-0	Dimethyl Disulfide	ND	14	ND	3.7	
616-44-4	3-Methylthiophene	ND	29	ND	7.3	
110-01-0	Tetrahydrothiophene	ND	26	ND	7.3	
638-02-8	2,5-Dimethylthiophene	ND	34	ND	7.3	
872-55-9	2-Ethylthiophene	ND	34	ND	7.3	
110-81-6	Diethyl Disulfide	ND	18	ND	3.7	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC. Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank**
Client Project ID: **WRS**

CAS Project ID: P2600986
CAS Sample ID: P060418-MB

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang
Sampling Media: Silco Canister
Test Notes:

Date Collected: NA
Time Collected: NA
Date Received: NA
Date Analyzed: 4/18/06
Time Analyzed: 09:19
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-LCS

Laboratory Control Sample Summary

Test Code: ASTM D 5504-01 Date Sampled: NA
Instrument ID: Agilent 6890A/GC13/SCD Date Received: NA
Analyst: Zheng Wang Date Analyzed: 4/18/06
Sampling Media: Silco Canister Volume(s) Analyzed: NA
Test Notes:

Compound	Spike Amount LCS ppbV	Result LCS ppbV	% Recovery LCS	CAS Acceptance Limits
Hydrogen Sulfide	1,980	1,920	97	70-129
Carbonyl Sulfide	2,130	2,180	102	80-138
Methyl Mercaptan	2,080	2,260	109	78-128

Verified By: RL Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **L-1**
Client Project ID: **WRS**

CAS Project ID: P2600986
CAS Sample ID: P2600986-001

Test Code: GC/NPD
Instrument ID: Agilent 6890N/GC14/NPD
Analyst: Madeleine Dangazyan
Sampling Media: Treated Alumina Tube
Test Notes: **BC, DE**

Date Collected: 4/17/06
Date Received: 4/18/06
Date Analyzed: 4/18/06
Desorption Volume: 2.0 ml
Volume Sampled: 101.8 Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	ND	2.0	ND	1.1	
75-04-7	Ethylamine	< 0.22	ND	2.2	ND	1.2	
75-50-3	Trimethylamine	< 0.19	ND	1.9	ND	0.77	
75-31-0	Isopropylamine	< 0.20	ND	2.0	ND	0.82	
75-64-9	t-Butylamine	< 0.21	ND	2.0	ND	0.68	
107-10-8	Propylamine	< 0.20	ND	1.9	ND	0.80	
109-89-7	Diethylamine	< 0.21	ND	2.0	ND	0.68	
13952-84-6	s-Butylamine	< 0.20	ND	2.0	ND	0.67	
78-81-9	Isobutylamine	< 0.19	ND	1.9	ND	0.63	
109-73-9	Butylamine	< 0.20	ND	1.9	ND	0.64	
108-18-9	Diisopropylamine	< 0.21	ND	2.1	ND	0.50	
121-44-8	Triethylamine	< 0.21	ND	2.0	ND	0.49	
142-84-7	Dipropylamine	< 0.42	ND	4.1	ND	0.99	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: Rc Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Field Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P2600986-002

Test Code: GC/NPD Date Collected: 4/17/06
Instrument ID: Agilent 6890N/GC14/NPD Date Received: 4/18/06
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Treated Alumina Tube Desorption Volume: 2.0 ml
Test Notes: **BC, DE** Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	NA	NA	NA	NA	
75-04-7	Ethylamine	< 0.22	NA	NA	NA	NA	
75-50-3	Trimethylamine	< 0.19	NA	NA	NA	NA	
75-31-0	Isopropylamine	< 0.20	NA	NA	NA	NA	
75-64-9	t-Butylamine	< 0.21	NA	NA	NA	NA	
107-10-8	Propylamine	< 0.20	NA	NA	NA	NA	
109-89-7	Diethylamine	< 0.21	NA	NA	NA	NA	
13952-84-6	s-Butylamine	< 0.20	NA	NA	NA	NA	
78-81-9	Isobutylamine	< 0.19	NA	NA	NA	NA	
109-73-9	Butylamine	< 0.20	NA	NA	NA	NA	
108-18-9	Diisopropylamine	< 0.21	NA	NA	NA	NA	
121-44-8	Triethylamine	< 0.21	NA	NA	NA	NA	
142-84-7	Dipropylamine	< 0.42	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RG Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-MB

Test Code: GC/NPD Date Collected: NA
Instrument ID: Agilent 6890N/GC14/NPD Date Received: NA
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Treated Alumina Tube Desorption Volume: 2.0 ml
Test Notes: **BC, DE** Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
124-40-3	Dimethylamine	< 0.20	NA	NA	NA	NA	
75-04-7	Ethylamine	< 0.22	NA	NA	NA	NA	
75-50-3	Trimethylamine	< 0.19	NA	NA	NA	NA	
75-31-0	Isopropylamine	< 0.20	NA	NA	NA	NA	
75-64-9	t-Butylamine	< 0.21	NA	NA	NA	NA	
107-10-8	Propylamine	< 0.20	NA	NA	NA	NA	
109-89-7	Diethylamine	< 0.21	NA	NA	NA	NA	
13952-84-6	s-Butylamine	< 0.20	NA	NA	NA	NA	
78-81-9	Isobutylamine	< 0.19	NA	NA	NA	NA	
109-73-9	Butylamine	< 0.20	NA	NA	NA	NA	
108-18-9	Diisopropylamine	< 0.21	NA	NA	NA	NA	
121-44-8	Triethylamine	< 0.21	NA	NA	NA	NA	
142-84-7	Dipropylamine	< 0.42	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: Re Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID : P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-LCS

Laboratory Control Sample Summary

Test Code: GC/NPD Date Collected: NA
Instrument ID: Agilent 6890N/GC14/NPD Date Received: NA
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Treated Alumina Tube Volume(s) Analyzed: NA
Test Notes:

Compound	Spike Amount LCS µg/ml	Result LCS µg/ml	% Recovery LCS	CAS Acceptance Limits	Data Qualifier
Dimethylamine	13.0	10.1	78	50-150	
Ethylamine	14.0	10.9	78	50-150	
Trimethylamine	14.9	10.1	68	50-150	
Isopropylamine	21.4	18.7	87	50-150	
t-Butylamine	10.8	9.50	88	50-150	
Propylamine	12.0	10.6	88	50-150	
Diethylamine	10.7	9.66	90	50-150	
s-Butylamine	11.3	10.6	94	50-150	
Isobutylamine	12.3	11.3	92	50-150	
Butylamine	13.8	12.9	94	50-150	
Diisopropylamine	13.9	12.8	92	50-150	
Triethylamine	13.3	11.7	88	50-150	
Dipropylamine	12.9	12.0	93	50-150	

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **L-1**
Client Project ID: **WRS**

CAS Project ID: P2600986
CAS Sample ID: P2600986-001B

Test Code: GC/MS
Instrument ID: HP5970/HP5890II+/MS4
Analyst: Madeleine Dangazyan
Sampling Media: Silica Gel Tube
Test Notes: **BC, DE**

Date Collected: 4/17/06
Date Received: 4/18/06
Date Analyzed: 4/18/06
Desorption Volume: 1.0 ml
Volume Sampled: 100.07 Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	**2.0**	**20**	11	**8.1**	4.3	
79-09-4	Propanoic Acid (Propionic)	< 0.27	ND	2.6	ND	0.87	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	< 0.26	ND	2.6	ND	0.72	
107-92-6	Butanoic Acid (Butyric)	**3.4**	**34**	2.6	**9.4**	0.71	
116-53-0	2-Methyl Butanoic Acid	**0.55**	**5.5**	2.5	**1.3**	0.60	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	ND	2.5	ND	0.61	
109-52-4	Pentanoic Acid (Valeric)	**1.3**	**13**	2.5	**3.0**	0.60	
97-61-0	2-Methylpentanoic Acid	< 0.25	ND	2.5	ND	0.52	
105-43-1	3-Methylpentanoic Acid	< 0.25	ND	2.5	ND	0.52	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	ND	2.5	ND	0.52	
142-62-1	Hexanoic Acid (Caproic)	**0.99**	**9.9**	2.4	**2.1**	0.51	
149-57-5	2-Ethylhexanoic Acid	< 0.27	ND	2.7	ND	0.45	
111-14-8	Heptanoic Acid	**0.38**	**3.8**	2.6	**0.71**	0.49	
124-07-2	Octanoic Acid (Caprylic)	**0.39**	**3.9**	2.5	**0.66**	0.42	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	ND	2.5	ND	0.48	
112-05-0	Nonanoic Acid	< 0.26	ND	2.6	ND	0.40	
65-85-0	Benzoic Acid	< 0.30	ND	3.0	ND	0.61	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: Rw Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Field Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P2600986-002B

Test Code: GC/MS Date Collected: 4/17/06
Instrument ID: *HP5970/HP5890II+/MS4* Date Received: 4/18/06
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Silica Gel Tube Desorption Volume: 1.0 ml
Test Notes: **BC, DE** Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	< 1.1	NA	NA	NA	NA	
79-09-4	Propanoic Acid (Propionic)	< 0.27	NA	NA	NA	NA	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	< 0.26	NA	NA	NA	NA	
107-92-6	Butanoic Acid (Butyric)	< 0.26	NA	NA	NA	NA	
116-53-0	2-Methyl Butanoic Acid	< 0.25	NA	NA	NA	NA	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	NA	NA	NA	NA	
109-52-4	Pentanoic Acid (Valeric)	< 0.25	NA	NA	NA	NA	
97-61-0	2-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
105-43-1	3-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	NA	NA	NA	NA	
142-62-1	Hexanoic Acid (Caproic)	< 0.24	NA	NA	NA	NA	
149-57-5	2-Ethylhexanoic Acid	< 0.27	NA	NA	NA	NA	
111-14-8	Heptanoic Acid	< 0.26	NA	NA	NA	NA	
124-07-2	Octanoic Acid (Caprylic)	< 0.25	NA	NA	NA	NA	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	NA	NA	NA	NA	
112-05-0	Nonanoic Acid	< 0.26	NA	NA	NA	NA	
65-85-0	Benzoic Acid	< 0.30	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-MB

Test Code: GC/MS Date Collected: NA
Instrument ID: HP5970/HP5890II+/MS4 Date Received: NA
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Silica Gel Tube Desorption Volume: 1.0 ml
Test Notes: **BC, DE** Volume Sampled: NA Liters

CAS #	Compound	Result µg/Tube	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualfier
64-19-7	Acetic Acid	< 1.1	NA	NA	NA	NA	
79-09-4	Propanoic Acid (Propionic)	< 0.27	NA	NA	NA	NA	
79-31-2	2-Methylpropanoic Acid (Isobutyric)	< 0.26	NA	NA	NA	NA	
107-92-6	Butanoic Acid (Butyric)	< 0.26	NA	NA	NA	NA	
116-53-0	2-Methyl Butanoic Acid	< 0.25	NA	NA	NA	NA	
503-74-2	3-Methyl Butanoic Acid (Isovaleric)	< 0.25	NA	NA	NA	NA	
109-52-4	Pentanoic Acid (Valeric)	< 0.25	NA	NA	NA	NA	
97-61-0	2-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
105-43-1	3-Methylpentanoic Acid	< 0.25	NA	NA	NA	NA	
646-07-1	4-Methylpentanoic Acid (Isocaproic)	< 0.25	NA	NA	NA	NA	
142-62-1	Hexanoic Acid (Caproic)	< 0.24	NA	NA	NA	NA	
149-57-5	2-Ethylhexanoic Acid	< 0.27	NA	NA	NA	NA	
111-14-8	Heptanoic Acid	< 0.26	NA	NA	NA	NA	
124-07-2	Octanoic Acid (Caprylic)	< 0.25	NA	NA	NA	NA	
98-89-5	Cyclohexanecarboxylic Acid	< 0.25	NA	NA	NA	NA	
112-05-0	Nonanoic Acid	< 0.26	NA	NA	NA	NA	
65-85-0	Benzoic Acid	< 0.30	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable
BC = Results reported are not blank corrected
DE = Results reported are corrected for desorption efficiency.

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID : P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-LCS

Laboratory Control Sample Summary

Test Code: GC/MS Date Collected: NA
Instrument ID: HP5970/HP5890II+/MS4 Date Received: NA
Analyst: Madeleine Dangazyan Date Analyzed: 4/18/06
Sampling Media: Silica Gel Tube Volume(s) Analyzed: NA
Test Notes:

Compound	Spike Amount LCS µg/ml	Result LCS µg/ml	% Recovery LCS	CAS Acceptance Limits	Data Qualifier
Acetic Acid	27.0	29.4	**109**	70-130	
Propanoic Acid (Propionic)	12.1	12.6	**104**	70-130	
2-Methylpropanoic Acid (Isobutyric)	14.6	15.1	**103**	70-130	
Butanoic Acid (Butyric)	14.0	14.5	**104**	70-130	
2-Methyl Butanoic Acid	15.2	15.4	**101**	70-130	
3-Methyl Butanoic Acid (Isovaleric)	14.7	14.8	**101**	70-130	
Pentanoic Acid (Valeric)	14.7	14.8	**101**	70-130	
2-Methylpentanoic Acid	15.4	15.5	**100**	70-130	
3-Methylpentanoic Acid	15.5	15.2	**98**	70-130	
4-Methylpentanoic Acid (Isocaproic)	15.3	15.0	**98**	70-130	
Hexanoic Acid (Caproic)	15.8	15.5	**98**	70-130	
2-Ethylhexanoic Acid	15.4	14.7	**95**	70-130	
Heptanoic Acid	16.6	16.0	**96**	70-130	
Octanoic Acid (Caprylic)	16.4	16.0	**98**	70-130	
Cyclohexanecarboxylic Acid	15.4	15.2	**99**	70-130	
Nonanoic Acid	16.7	15.6	**94**	70-130	
Benzoic Acid	12.8	12.5	**97**	70-130	

Verified By: RC Date: 4/20/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: L-1
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P2600986-001C

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:
Container ID: SL00092

Date Collected: 4/17/06
Date Received: 4/18/06
Date(s) Analyzed: 4/18/06
Volume(s) Analyzed: 0.50 Liter(s)
0.050 Liter(s)

Pi 1 = -1.2 Pf 1 = 5.1
Can D.F. = 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.1**	2.9	**0.62**	0.59	
74-87-3	Chloromethane	ND	2.9	ND	1.4	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.9	ND	0.42	
75-01-4	Vinyl Chloride	ND	2.9	ND	1.2	
106-99-0	1,3-Butadiene	ND	2.9	ND	1.3	
74-83-9	Bromomethane	ND	2.9	ND	0.76	
75-00-3	Chloroethane	ND	2.9	ND	1.1	
64-17-5	Ethanol	**470**	15	**250**	7.8	
75-05-8	Acetonitrile	ND	2.9	ND	1.8	
107-02-8	Acrolein	ND	2.9	ND	1.3	
67-64-1	Acetone	ND	15	ND	6.2	
75-69-4	Trichlorofluoromethane	ND	2.9	ND	0.52	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.9	ND	1.2	
107-13-1	Acrylonitrile	ND	2.9	ND	1.4	
75-35-4	1,1-Dichloroethene	ND	2.9	ND	0.74	
75-09-2	Methylene chloride	ND	2.9	ND	0.85	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.9	ND	0.94	
76-13-1	Trichlorotrifluoroethane	ND	2.9	ND	0.38	
75-15-0	Carbon Disulfide	ND	2.9	ND	0.94	
156-60-5	trans-1,2-Dichloroethene	ND	2.9	ND	0.74	
75-34-3	1,1-Dichloroethane	ND	2.9	ND	0.73	
1634-04-4	Methyl tert-Butyl Ether	ND	2.9	ND	0.82	
108-05-4	Vinyl Acetate	ND	2.9	ND	0.84	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: L-1
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P2600986-001C

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:
Container ID: SL00092

Date Collected: 4/17/06
Date Received: 4/18/06
Date(s) Analyzed: 4/18/06
Volume(s) Analyzed: 0.50 Liter(s)
0.050 Liter(s)

Pi 1 = -1.2 Pf 1 = 5.1
Can D.F. = 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-93-3	2-Butanone (MEK)	ND	2.9	ND	1.0	
156-59-2	cis-1,2-Dichloroethene	ND	2.9	ND	0.74	
110-54-3	n-Hexane	ND	2.9	ND	0.83	
67-66-3	Chloroform	ND	2.9	ND	0.60	
107-06-2	1,2-Dichloroethane	ND	2.9	ND	0.73	
71-55-6	1,1,1-Trichloroethane	ND	2.9	ND	0.54	
71-43-2	Benzene	ND	2.9	ND	0.92	
56-23-5	Carbon Tetrachloride	ND	2.9	ND	0.47	
78-87-5	1,2-Dichloropropane	ND	2.9	ND	0.64	
75-27-4	Bromodichloromethane	ND	2.9	ND	0.44	
79-01-6	Trichloroethene	ND	2.9	ND	0.55	
123-91-1	1,4-Dioxane	ND	2.9	ND	0.82	
10061-01-5	cis-1,3-Dichloropropene	ND	2.9	ND	0.65	
108-10-1	4-Methyl-2-pentanone	ND	2.9	ND	0.72	
10061-02-6	trans-1,3-Dichloropropene	ND	2.9	ND	0.65	
79-00-5	1,1,2-Trichloroethane	ND	2.9	ND	0.54	
108-88-3	Toluene	**3.6**	2.9	**0.95**	0.78	
591-78-6	2-Hexanone	ND	2.9	ND	0.72	
124-48-1	Dibromochloromethane	ND	2.9	ND	0.35	
106-93-4	1,2-Dibromoethane	ND	2.9	ND	0.38	
123-86-4	n-Butyl Acetate	ND	2.9	ND	0.62	
127-18-4	Tetrachloroethene	ND	2.9	ND	0.43	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: L-1
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P2600986-001C

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:
Container ID: SL00092

Date Collected: 4/17/06
Date Received: 4/18/06
Date(s) Analyzed: 4/18/06
Volume(s) Analyzed: 0.50 Liter(s)
0.050 Liter(s)

Pi 1 = -1.2 Pf 1 = 5.1
Can D.F. = 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
108-90-7	Chlorobenzene	ND	2.9	ND	0.64	
100-41-4	Ethylbenzene	ND	2.9	ND	0.68	
179601-23-1	*m,p* -Xylenes	ND	2.9	ND	0.68	
75-25-2	Bromoform	ND	2.9	ND	0.28	
100-42-5	Styrene	ND	2.9	ND	0.69	
95-47-6	o-Xylene	ND	2.9	ND	0.68	
111-84-2	n-Nonane	ND	2.9	ND	0.56	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.9	ND	0.43	
98-82-8	Cumene	ND	2.9	ND	0.60	
80-56-8	alpha-Pinene	ND	2.9	ND	0.53	
622-96-8	4-Ethyltoluene	ND	2.9	ND	0.60	
108-67-8	1,3,5-Trimethylbenzene	ND	2.9	ND	0.60	
95-63-6	1,2,4-Trimethylbenzene	ND	2.9	ND	0.60	
100-44-7	Benzyl Chloride	ND	2.9	ND	0.57	
541-73-1	1,3-Dichlorobenzene	ND	2.9	ND	0.49	
106-46-7	1,4-Dichlorobenzene	ND	2.9	ND	0.49	
95-50-1	1,2-Dichlorobenzene	ND	2.9	ND	0.49	
5989-27-5	d-Limonene	ND	2.9	ND	0.53	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.9	ND	0.30	
120-82-1	1,2,4-Trichlorobenzene	ND	2.9	ND	0.40	
91-20-3	Naphthalene	ND	2.9	ND	0.56	
87-68-3	Hexachlorobutadiene	ND	2.9	ND	0.28	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date(s) Analyzed: 4/18/06
Sampling Media: Silco Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	1.0	ND	0.20	
74-87-3	Chloromethane	ND	1.0	ND	0.48	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.0	ND	0.14	
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
106-99-0	1,3-Butadiene	ND	1.0	ND	0.45	
74-83-9	Bromomethane	ND	1.0	ND	0.26	
75-00-3	Chloroethane	ND	1.0	ND	0.38	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	1.0	ND	0.60	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25	
75-09-2	Methylene chloride	ND	1.0	ND	0.29	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.0	ND	0.32	
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25	
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28	
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank**
Client Project ID: ***WRS***

CAS Project ID: P2600986
CAS Sample ID: P060418-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 4/18/06
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
110-54-3	n-Hexane	ND	1.0	ND	0.28	
67-66-3	Chloroform	ND	1.0	ND	0.20	
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18	
71-43-2	Benzene	ND	1.0	ND	0.31	
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16	
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22	
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15	
79-01-6	Trichloroethene	ND	1.0	ND	0.19	
123-91-1	1,4-Dioxane	ND	1.0	ND	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18	
108-88-3	Toluene	ND	1.0	ND	0.27	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12	
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13	
123-86-4	n-Butyl Acetate	ND	1.0	ND	0.21	
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date(s) Analyzed: 4/18/06
Sampling Media: Silco Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
108-90-7	Chlorobenzene	ND	1.0	ND	0.22	
100-41-4	Ethylbenzene	ND	1.0	ND	0.23	
179601-23-1	*m,p* -Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	1.0	ND	0.097	
100-42-5	Styrene	ND	1.0	ND	0.23	
95-47-6	o-Xylene	ND	1.0	ND	0.23	
111-84-2	n-Nonane	ND	1.0	ND	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15	
98-82-8	Cumene	ND	1.0	ND	0.20	
80-56-8	alpha-Pinene	ND	1.0	ND	0.18	
622-96-8	4-Ethyltoluene	ND	1.0	ND	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ND	0.20	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ND	0.20	
100-44-7	Benzyl Chloride	ND	1.0	ND	0.19	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17	
5989-27-5	d-Limonene	ND	1.0	ND	0.18	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.13	
91-20-3	Naphthalene	ND	1.0	ND	0.19	
87-68-3	Hexachlorobutadiene	ND	1.0	ND	0.094	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Project ID: **WRS** CAS Project ID: P2600986

Surrogate Spike Recovery Results

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Collected: 4/17/06
Analyst: Rusty Bravo Date Received: 4/18/06
Sampling Media: Silco Canister(s) Date Analyzed: 4/18/06
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P060418-MB	**104**	70-140	**99**	70-140	**95**	70-140	
Lab Control Sample	P060418-LCS	**115**	70-140	**100**	70-140	**94**	70-140	
L-1	P2600986-001C	**128**	70-140	**99**	70-140	**96**	70-140	

Verified By: RG Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: Weston Solutions of Michigan, Inc.
Client Sample ID: Lab Control Sample
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P060418-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 4/18/06
Volume(s) Analyzed: NA Liter

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	25.8	26.4	**103**	68-124	
74-87-3	Chloromethane	25.3	22.3	**88**	65-120	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.3	20.2	**77**	47-130	
75-01-4	Vinyl Chloride	25.8	24.0	**93**	67-127	
106-99-0	1,3-Butadiene	27.0	21.1	**78**	65-118	
74-83-9	Bromomethane	25.8	25.1	**97**	65-134	
75-00-3	Chloroethane	26.0	23.2	**89**	71-121	
64-17-5	Ethanol	24.0	23.5	**98**	66-133	
75-05-8	Acetonitrile	23.8	22.1	**93**	64-124	
107-02-8	Acrolein	23.5	18.6	**79**	61-121	
67-64-1	Acetone	27.3	22.6	**83**	62-113	
75-69-4	Trichlorofluoromethane	24.3	25.6	**106**	68-130	
67-63-0	2-Propanol (Isopropyl Alcohol)	24.8	23.5	**95**	72-119	
107-13-1	Acrylonitrile	24.5	22.6	**92**	71-129	
75-35-4	1,1-Dichloroethene	27.5	25.6	**93**	74-126	
75-09-2	Methylene chloride	27.3	24.5	**90**	68-120	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	25.5	19.5	**76**	61-128	
76-13-1	Trichlorotrifluoroethane	27.5	26.2	**95**	68-127	
75-15-0	Carbon Disulfide	25.0	24.3	**97**	69-126	
156-60-5	trans-1,2-Dichloroethene	26.8	25.8	**96**	76-124	
75-34-3	1,1-Dichloroethane	27.3	24.0	**88**	75-120	
1634-04-4	Methyl tert-Butyl Ether	27.0	26.2	**97**	68-123	
108-05-4	Vinyl Acetate	25.8	21.4	**83**	56-139	

Verified By: RG Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Weston Solutions of Michigan, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P2600986
Client Project ID: **WRS** CAS Sample ID: P060418-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date Received: NA
Analyst: Rusty Bravo Date Analyzed: 4/18/06
Sampling Media: Silco Canister Volume(s) Analyzed: NA Liter
Test Notes:

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
78-93-3	2-Butanone (MEK)	27.3	25.6	**94**	74-126	
156-59-2	cis-1,2-Dichloroethene	27.3	26.5	**97**	77-122	
110-54-3	n-Hexane	27.3	23.9	**88**	72-119	
67-66-3	Chloroform	28.5	28.7	**101**	75-119	
107-06-2	1,2-Dichloroethane	26.8	28.5	**107**	74-125	
71-55-6	1,1,1-Trichloroethane	27.0	29.2	**108**	75-129	
71-43-2	Benzene	27.0	23.8	**88**	69-118	
56-23-5	Carbon Tetrachloride	26.5	29.6	**112**	72-139	
78-87-5	1,2-Dichloropropane	26.8	23.9	**89**	75-122	
75-27-4	Bromodichloromethane	28.3	29.7	**105**	79-125	
79-01-6	Trichloroethene	28.3	26.3	**93**	74-123	
123-91-1	1,4-Dioxane	28.3	27.0	**96**	80-128	
10061-01-5	cis-1,3-Dichloropropene	25.8	24.4	**95**	81-126	
108-10-1	4-Methyl-2-pentanone	27.3	25.7	**94**	78-132	
10061-02-6	trans-1,3-Dichloropropene	28.8	28.5	**99**	80-130	
79-00-5	1,1,2-Trichloroethane	26.5	24.9	**94**	76-123	
108-88-3	Toluene	26.8	24.9	**93**	74-124	
591-78-6	2-Hexanone	27.0	26.9	**100**	77-140	
124-48-1	Dibromochloromethane	27.0	29.3	**109**	81-139	
106-93-4	1,2-Dibromoethane	26.5	26.4	**100**	77-133	
123-86-4	n-Butyl Acetate	25.8	24.1	**94**	71-146	
127-18-4	Tetrachloroethene	26.5	24.8	**94**	71-135	

Verified By: Re Date: 4/19/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: Weston Solutions of Michigan, Inc.
Client Sample ID: Lab Control Sample
Client Project ID: WRS

CAS Project ID: P2600986
CAS Sample ID: P060418-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Silco Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 4/18/06
Volume(s) Analyzed: NA Liter

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
108-90-7	Chlorobenzene	26.8	25.0	93	76-126	
100-41-4	Ethylbenzene	26.5	26.4	100	77-127	
179601-23-1	m,p-Xylenes	58.0	59.7	103	77-128	
75-25-2	Bromoform	29.5	30.4	103	77-143	
100-42-5	Styrene	26.5	26.0	98	71-139	
95-47-6	o-Xylene	28.3	28.7	102	76-128	
111-84-2	n-Nonane	26.3	25.4	97	73-131	
79-34-5	1,1,2,2-Tetrachloroethane	28.3	26.9	95	79-130	
98-82-8	Cumene	27.3	27.7	102	77-128	
80-56-8	alpha-Pinene	26.3	24.9	95	66-140	
622-96-8	4-Ethyltoluene	27.3	27.7	102	74-132	
108-67-8	1,3,5-Trimethylbenzene	26.5	27.1	102	72-134	
95-63-6	1,2,4-Trimethylbenzene	26.8	27.9	104	74-134	
100-44-7	Benzyl Chloride	26.5	28.5	108	72-174	
541-73-1	1,3-Dichlorobenzene	26.3	25.8	98	73-137	
106-46-7	1,4-Dichlorobenzene	27.0	26.9	100	71-136	
95-50-1	1,2-Dichlorobenzene	26.8	26.0	97	70-140	
5989-27-5	d-Limonene	26.0	23.0	88	20-202	
96-12-8	1,2-Dibromo-3-chloropropane	25.8	26.1	101	77-157	
120-82-1	1,2,4-Trichlorobenzene	28.3	27.7	98	68-154	
91-20-3	Naphthalene	25.8	25.6	99	63-160	
87-68-3	Hexachlorobutadiene	27.5	27.7	101	61-147	

Verified By: RC Date: 4/19/06

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Weston Solutions, Inc. Work order: P2600986

Project: WRS

Sample(s) received on: 4/18/06 Date opened: 4/18/06 by: MZ

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

			Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?		☐	☒	☐
	Location of seal(s)? _____	Sealing Lid?	☐	☐	☒
	Were signature and date included?		☐	☐	☒
	Were seals intact?		☐	☐	☒
	Were custody seals on outside of sample container?		☐	☒	☐
	Location of seal(s)? _____	Sealing Lid?	☐	☐	☒
	Were signature and date included?		☐	☐	☒
	Were seals intact?		☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?		☒	☐	☐
3	Did **sample containers** arrive in good condition?		☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?		☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?		☒	☐	☐
6	Was **sample volume** received adequate for analysis?		☒	☐	☐
7	Are samples within specified holding times?		☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?		☐	☐	☒
	Cooler Temperature NA °C				
	Blank Temperature NA °C				
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?		☐	☐	☒
	Is there a client indication that the submitted samples are **pH** (acid) preserved?		☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?		☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?		☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?		☒	☐	☐
	Do they contain moisture?		☐	☒	☐
11	**Badges:** Are the badges properly capped and intact?		☐	☐	☒
	Are dual bed badges separated and individually capped and intact?		☐	☐	☒

Lab Sample ID	Required pH (as received, if required)	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2600986-001			NA	
P2600986-001B			NA	
P2600986-001C			NA	
P2600986-002			NA	
P2600986-002B			NA	

Explain any discrepancies: (include lab sample ID numbers):

Columbia Analytical Services

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record & Analytical Service Request

Requested Turnaround Time by Close of Business Day (Surcharges) Please Circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (15%) 10 Day-Standard

CAS Project No. P2600986

CAS Contact:

Reporting Information (Company Name & Address)
Ted LaMarre
Weston Solutions, Inc.
Attention: Okemos, MI

P.O. # / Billing Information

Project Name: WRS

Project Number

Phone: (517) 381-5926 Fax:

Email Address for Result Reporting: Ted.LaMarre@WestonSolutions.com nposavatz@grtusa.com

Sampler (Print & Sign): Nancy Posavatz

	Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Sample Type (Air/Liquid /Solid/Tube)	Canister ID (Bar Code#)	Flow Controller (Bar Code #)	Sample Volume	Amines	Carboxylic Acids	VOCs	Reduced Sulfur compounds	Comments e.g. Preservative or specific instructions
1.	L-1	4/17/06	13:48	(1)	Air/tube				X				24hr TAT
2.	L-1	4/17/06	13:49	↓	Air/tube	1740600210				X			"
3.	L-1	4/17/06	13:39	↓	Air	2818	35-1.5-004				X	X	-24"
4.	Field blank	4/17/06	12:15	(2)	Air/tube				X				"
5.	Field blank	4/17/06	12:15	↓	Air/tube	1706600208				X			"
				(LPM)									
				In. Flow	Post. Flow								
	1. Start 1208	stop	1348	1.033	1.003								
	2. Start 1209	stop	1349	1.018	0.9834								
	3. Start 1209	stop	1339										

Report Tier Levels - please select
Tier I - (default if not specified) ____
Tier II (QC forms) X
Tier III (QC, Raw Data, Spectra) 10% Surcharge ____
Other ____
EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 4/17/6 15:26	Time: 15:26	Received by: (Signature)	Date: 4/18/06	Time: 0930
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C 9.6 9.0

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